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A JOINT PUBLICATION OF THE SOUTHERN ECONOMIC ASSOCIATION AND THE UNIVERSITY OF NORTH CAROLINA

Published Quarterly at Chapel Hill, N. C.

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The SOUTHERN ECONOMIC JOURNAL

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THE OIL STRIKE OF 1945

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I

On September 16, 1945, 300 members of the Oil Workers International Union (CIO) began a strike at Michigan's largest refinery, the Socony-Vacuum plant at Trenton, in support of the union's demand of 52 hours' pay for 40 hours' work. The company's offer of a 15 per cent hourly rate increase had been rejected. As new stoppages occurred in other Socony-Vacuum refineries in Michigan and in Pure Oil Company refineries in the Midwest, President O. A. Knight of the OWIU declared: "The fire is started, and I'm afraid it will spread rapidly throughout the Nation." In the course of the next few days refineries owned by Gulf, Shell, Sinclair, and other companies in Texas and California were affected by actual stoppages or threatened stoppages.[1] By September 21 the strike was front page news in the New York *Times*. Gathering momentum as they spread, these local stoppages crystallized into the first nation-wide strike in the history of the oil industry, ultimately involving more than 43,000 refinery workers in 20 states.

II

Directly involved were 22 oil companies, some or all of whose plants had been seized by the Navy. They controlled one-third of the refining capacity in the United States and employed nearly 22 per cent of the total number of hourly employees in all refineries.[2] The outcome affected the national pattern of wage rates in oil. To that extent not only the refining branch of the oil industry but ultimately the entire oil industry may be said to have been involved in the dispute.[3]

[1] New York *Times*, Sept. 17–Sept. 20, 1945.

[2] National Wage Stabilization Board, *Research and Statistics Report No. II*, Oct. 23, 1946, p. 5. The companies were: Ashland Oil and Refining Company, Atlantic Refining Company, Cities Service Company (Delaware), Cities Service Company (Pennsylvania), Crown Central Petroleum Corporation, Magnolia Petroleum Corporation, National Refining Company, Pan American Refining Corporation, Pure Oil Company, Republic Oil Refining Company, Shell Oil Company, Sinclair Refining Company, Socony-Vacuum Oil Company, Inc., Standard Oil Company (Ohio), Texas Company, Union Oil Company of California, American Liberty Oil Company, Chalmette Petroleum Corporation, Elk Refining Company, Gulf Oil Corporation, Petroleum Specialties, Inc., Phillips Petroleum Company.

[3] Although strictly speaking only 22 companies were directly involved. And these, incidentally, objected to their designation as a "party" to the dispute. As one company representative stated: "This is a controversy between, as far as we are concerned, various locals of the OWIU and various companies." To which a member of the Oil Panel re-

The oil industry is dominated by large integrated companies. Twenty companies with combined assets of $9 billion represented about 60 per cent of the investment in the industry in 1939. Collectively, they owned or controlled through stock ownership 405 subsidiary companies operating in the United States and jointly owned 35 companies.[4] The leading firm, Standard Oil Company (New Jersey), processed 13 per cent of the total crude oil processed in the United States in 1945 and produced 20 per cent of the 100 octane gasoline supplied the Allied Nations during the war.[5] The 20 majors accounted for more than 73 per cent of crude oil refining capacity and 84.3 per cent of gasoline output in 1938.[6]

There were 485 petroleum refineries in operation in 1939 and 412 at the end of 1942.[7] Wartime closings were induced both by shortages of materials, manpower, and transportation, and by such developments as completion of the "big inch" pipe line, which transported crude to eastern refineries, and more efficient use of the larger refineries equipped for cracking.[8] Wage earners increased in number from about 73,000 in 1939 to 95,000 in December 1945.[9] In August 1944, 90 per cent were employed in 9 states, with slightly more than 40 per cent concentrated in California and Texas.[10]

Labor organization on a fairly extensive scale in petroleum refining is a development of recent years.[11] By 1944 between 50,000 and 60,000 refinery work-

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sponded: "Let's use 'party' in the generic sense." Oil Panel Executive Meeting, *Minutes*, Dec. 4, 1945, p. 87.

[4] Twenty major companies, in order of their total assets, as of Dec. 31, 1938, included: Standard Oil (New Jersey), Socony-Vacuum, Standard Oil of Indiana, The Texas Corporation, Standard Oil of California, Gulf Oil Corporation, Cities Service Company, Shell Union Oil, Consolidated Oil, Phillips Petroleum Company, Tide-Water Associated Oil Company, Atlantic Refining, Pure Oil Company, Union Oil Company, Sun Oil Company. The Ohio Oil Company, Continental Oil Company, Standard Oil of Ohio, Mid-Continent Petroleum Company, Skelly Oil Corporation. TNEC Hearings, Part 14-A, *Petroleum Industry: Economic Outline and Data Relating to the Petroleum Industry*, p. 7708. The high degree of control by the majors is demonstrated in data published by TNEC which show their percentage of ownership or control of all four branches of the petroleum industry—production, transportation, refining, and marketing. See TNEC Monograph No. 39, *Control of the Petroleum Industry by Major Oil Companies*, pp. 1, 3, 5.

[5] *Moody's Industrials*, 1946, p. 2521. It had assets of $2 billion in 1939. TNEC Monograph No. 39, p. 3.

[6] Report of the Smaller War Plants Corporation to the Senate Small Business Committee, *Economic Concentration and World War II*, Table 57, p. 166.

[7] "Earnings in Southwestern Refineries, 1943," *Monthly Labor Review*, Jan. 1944, p. 124.

[8] *Ibid.*, p. 126. Concentration of employment in large refineries grew during World War II. See Progress Report of the chairman of the Senate Small Business Committee, *Future of Independent Business*, Jan. 2, 1947, p. 23, and *Economic Concentration and World War II*, p. 163.

[9] Paul Guthrie, *Memorandum to National Wage Stabilization Board*, March 29, 1946. (NWSB Files, Washington, D. C.).

[10] *Union Agreements in the Petroleum Refining Industry in Effect in 1944*, U. S. Dept. of Labor Bulletin No. 823, p. 1.

[11] Background material on labor organization is found in Daniel Horowitz, *Labor Relations in the Petroleum Industry*, Works Project No. 1040 (mimeographed), N. Y., 1937.

ers (about 65 per cent of those employed in petroleum refining) were covered by agreements with unions affiliated with national labor organizations. More than 90 per cent of these were covered by agreements negotiated by the Oil Workers International Union.[12]

Refinery workers comprise the bulk of the OWIU membership. The union reported a membership of about 42,500 as of May 31, 1944, and 58,000 as of May 31, 1945.[13] The wartime increase in membership was accompanied by expansion in union activities and growth in influence. A monthly newspaper was launched, and research and publicity efforts were extended. Local and international officers served on War Labor Board panels and committees. At its 1944 convention, the goal of "national contracts" was set forth in a 10-point program for the "preservation and extension" of the union.[14]

A considerable number of refinery workers in 1945 were under agreements negotiated by independent unions. These date back to April 1918 with the introduction of an employee representation plan by Jersey Standard[15] in its Bayonne refinery. After the Supreme Court in 1937 "blasted the structure of employee representation erected so carefully over the previous two decades,"[16] a number of independent unions joined the OWIU. The Jersey Standard unions, however, did not affiliate. Instead, according to Stuart Chase:[17]

> Labor lawyers were called in by the workers to help them set up new unions independent enough to pass the test . . . wherever a Jersey Standard Plan had been in operation. New constitutions, by-laws, contracts with the companies were drafted, and collective bargaining resumed.

In addition to introducing company unions into the industry, Jersey Standard has also exercised leadership in wage determination. "The policy throughout the oil industry is . . . to 'pay the prevailing wage.' But actually the level of that wage has usually followed an increase throughout . . . Jersey."[18]

In 1941 the OWIU initiated a campaign to organize the Standard Oil companies because, said President Knight, "to organize Standard is to organize the petroleum industry." In March 1943, however, he acknowledged that the campaign had not been successful, "after eighteen months of activity during which $156,000 has been expended."[19] Wartime wage controls had made it difficult for organizers to make the conventional promise of substantial wage gains as an inducement to join the union.

[12] *U. S. Dept. of Labor*, Bulletin No. 823, p. 1.

[13] *Proceedings*, 15th Convention, OWIU, 1944, p. 36; *Proceedings*, 16th Convention, OWIU, 1945, p. 41.

[14] *Proceedings*, 15th Convention, OWIU, 1944, p. 182.

[15] "Jersey Standard" refers to operating affiliates of Standard Oil Company (New Jersey).

[16] "Thirty Years of Labor Peace," *Fortune*, Nov. 1946, p. 209.

[17] See Stuart Chase, "A Generation of Industrial Peace," *The Lamp*, Oct. 1946.

[18] *Fortune, op. cit.*, p. 169.

[19] *Proceedings*, 13th Convention, 1942, pp. 4–5; *Proceedings*, 14th Convention, 1943, p. 4.

III

Between October 2, 1942, and August 18, 1945, all wage adjustments had been subject to government approval. Executive Order 9599, issued two days after V-J Day, however, permitted employers to grant increases without government approval, provided they were not used as the basis for seeking higher price ceilings. This order was amended on October 30, 1945, by Executive Order 9651 under which the OPA could consider for price purposes even unapproved wage increases after they had been in effect normally for at least six months.

On August 16, 1945, the President announced that the War Labor Board, which had applied wartime wage policy, would be terminated after the conclusion of the projected Labor-Management Conference on Industrial Relations. The War Labor Board, therefore, declined to accept jurisdiction over new dispute cases unless the parties should agree to abide by its decision.

Implicit in post-V-J-Day wage policy was the assumption that many employers could raise wage rates within existing price ceilings. Thus, concurrent with the issuance of Executive Order 9651, the President stated: "While the positions of different industries vary greatly, there is room in the existing price structure for business as a whole to grant increases in wage rates." He urged the full use of collective bargaining to determine what an industry "can pay under existing prices and conditions."[20]

In the meantime, labor groups, confronted with substantial losses in earnings ("take-home" pay) as a result of the reduction in hours accompanying the war's end, were demanding wage rate raises of 30 per cent—the approximate increase deemed necessary to maintain earnings.[21] Anticipating changes in wage stabilization regulations that were to occur after V-J Day, the OWIU Executive Council had instructed local bargaining groups to demand that new contracts provide for renegotiation of wages, "immediately after change, modification, or removal of present wage restrictions." Shortly before V-J Day the union's Executive Council set forth its reconversion wage demand concretely, viz., "52 hours' pay for 40 hours or less." And in September its newspaper noted significantly that the union "is prepared to take whatever action is necessary to achieve the 52–40 program."[22]

The petroleum industry expressed inability to meet the full union demand. The trade paper listed such industry problems as sharply increased plant investment, most of which would have to be paid for out of postwar earnings; unknown postwar competitive markets with available government-owned surplus processing facilities sufficient to create "the most highly competitive and restricted price market" in the industry's history; high materials and equipment costs and the likelihood of further price increases; need to rehabilitate the industry's marketing and other facilities, which had not been properly maintained or modernized during the war years; the inability of the normal prewar rate of

[20] New York *Times*, Oct. 31, 1945, p. 14.

[21] See Philip Murray, *The CIO Case for Substantial Wage Increases*, Nov. 1945, p. 9.

[22] *International Oil Worker*, June 1945, p. 1; Sept. 1945, p. 1.

return on invested capital to provide sufficient margin to permit extensive wage adjustments without placing the industry on an unsound economic basis.[23]

Shortly after V-J Day a number of refineries were closed down, occasioning layoffs. The union thereupon approached the oil companies demanding a reduction in hours and an increase in basic rates. Early in September the Jersey Standard companies offered a 15 per cent increase in wage rates to their employees.[24] Following acceptance of this offer, other oil companies which had been negotiating with the OWIU adopted 15 per cent as their maximum offer[25] and "several" companies "finally ordered 15 per cent paid."[26] The union interpreted this as an "industry" move designed to weaken its influence if not to destroy it. It thus apparently forced the OWIU into the extreme position of demanding the full 30 per cent take-home adjustment. On September 7, the OWIU president directed local unions to request "full take-home pay."[27]

If the 15 per cent increase offered voluntarily by employers were accepted by union leaders, then what functions could the union perform to justify its existence to its membership? The OWIU had given wide publicity to its demands for "full take-home pay." What could the union "deliver" to its membership that could not be obtained by independent unions or even by unorganized workers? A great many of the union's new members who had joined during the war, when normal trade union activity was limited by wage regulations and the no-strike pledge, were waiting for the answer to this question.

IV

On September 21, at the request of the OWIU president, the Federal Conciliation Commissioner invited union and oil company representatives to a conference in Chicago on September 25 and appointed a special commission to attempt settlement of the dispute.[28] This was to be the first conference involving a national industry affected by the CIO's "52–40" campaign. Although President Knight urged postponement of further strike action pending the outcome of the conference, stoppages continued. On the eve of the conference, some 27,000 oil workers were on strike; at least one-third of the nation's gasoline production was shut off.[29]

When the conference began on September 25 representatives of only nine

[23] *National Petroleum News*, Oct. 10, 1945, p. 38.

[24] *Ibid.*, Sept. 5, 1945, p. 5.

[25] *Proceedings*, 16th Convention, OWIU, 1945, pp. 16–17.

[26] *National Petroleum News*, Sept. 26, 1945, p. 8. "The pattern of the announcement," according to President Knight, "was in accordance with the industry's traditional policy of acting as a unit on wages and similar matters. . . . The union was not consulted or given an opportunity to discuss the companies' wage policies." *Proceedings* before the Oil Panel, Jan. 7, 1946, pp. 135–136.

[27] *National Petroleum News*, Oct. 24, 1945, p. 5.

[28] The breakdown of local bargaining was the reason given by President Knight for requesting the conference. *Ibid.*, Oct. 3, 1945, p. 5. The commission included Justice William Knous of the Colorado Supreme Court, August J. Hummert of St. Louis, and H. O. Hubbard of the U. S. Conciliation Service, Texas District.

[29] New York *Times*, Sept. 23, 1945, p. 34.

companies were present but only two companies were "prepared to do any business." Representatives of four companies were attending as "observers" and representatives of three said that they had no authority to act. Subsequently, observers for two more companies appeared.[30] The union was represented by its international officers and 20 representatives from its seven districts. Hopeful of bargaining on an industry-wide basis, the union had formed a national wage policy committee.

The first day's sessions ended in deadlock. Six companies charged the union with breaking contracts and expressed lack of faith in any new ones that might be drawn and the Sinclair Company accused the union of trying to "break" the company. The chairman's suggestion that the parties compromise between 15 per cent and 30 per cent was refused by the companies. Representatives of the Texas Company and Sinclair stated that 15 per cent was their maximum offer, "a stand observers believed their companies would take."[31]

On the second day, the Executive Council authorized President Knight to coordinate national strike strategy. This hint of possible further extension of the strike prompted Chairman Knous to special efforts to speed the discussion. Following a series of closed sessions attended by both sides, however, a Sinclair representative announced that the position of both sides was unchanged. "The Panel is seeking a formula for an overall settlement," he said. "The Union's only formula is a 30 per cent wage increase." But all the companies were "more or less committed" to 15 per cent and the union would not "get a penny above it."[32] Arguments advanced by management representatives in the course of the meetings included:[33] (1) The National Labor Relations Board had designated the bargaining units for the industry on a local basis. This prohibited the industry from making a nation-wide contract even should it desire to do so. (2) OWIU represented only a small minority of employees in the industry, the majority belonging to no union. (3) Many local problems could not be met by industry-wide bargaining. (4) Many local unions would accept the 15 per cent increase if permitted by international headquarters.

When the conference adjourned on September 27 about 35,000 refinery workers were on strike in seven states. The Conciliation Commissioner stated that the oil strike was holding up reconversion to a "greater extent than any other strike now in progress." At the request of Secretary Schwellenbach, the parties agreed to reconvene on September 29 in Washington where the Labor Secretary believed "more progress toward a settlement could be made." Secretary Schwellenbach observed that the government had no intention of forcing industry-wide negotiations—the joint conference had been called only because the need for petroleum products required "fast action" and time was lacking for separate

[30] *National Petroleum News*, Oct. 3, 1945, p. 12. One representative explained his silence at the sessions as follows: "If we so much as get up in a joint meeting to answer any union charges . . . we would in legal effect, be negotiating."

[31] *Ibid.*, Oct. 3, 1945, p. 4.

[32] New York *Times*, Sept. 23, 1945, pp. 1, 15.

[33] *National Petroleum News*, Oct. 3, 1945, p. 5.

negotiations. He told the press, however, that he was hopeful that agreement could be reached; that he knew of no plans for government seizure of refineries; and that union leaders had given assurances of no additional stoppages while negotiations continued. Other administration officials were reported to be less optimistic about the outcome of mediation since "virtually the entire segment of the oil industry" at the conference had followed the pattern set by the Texas Company in offering 15 per cent; and this appeared to be a "final" offer.[34]

At the opening of the Washington sessions on September 29, Secretary Schwellenbach appealed to both sides for concessions. The first day witnessed a minor recession in the union position when President Knight offered to settle on the terms met the day before by the Wilshire Company of Los Angeles, which had agreed to a 35 cents hourly increase. Little importance, however, was attached to this development since Wilshire employed only 1,000 men and the contract covered a 60-day period only.[35]

Although Judge Knous had warned the parties of the ultimate necessity of federal seizure in the event of failure of negotiations, they were "still poles apart" at the end of the second day's sessions. At the close of the third day's sessions the Sinclair representative declared, "There is no element in the situation to encourage the belief that another joint session will have any results. . . ." The union had received hundreds of telegrams from locals, urging no compromise, according to President Knight. And new stoppages had occurred in West Virginia, Oklahoma, Pennsylvania, New Jersey, New York, California, and Kansas. Finally, convinced of the futility of further discussions, Secretary Schwellenbach, shortly before midnight on October 1, proposed that the parties agree to arbitrate the wage issue. "There has been no collective bargaining," Mr. Schwellenbach stated. "What has happened has been a collective refusal to bargain." He requested the companies to return to the 40-hour week as soon as possible and to increase basic wage rates by 15 per cent. He asked the union to accept the 15 per cent. Both parties were asked to agree to accept an arbitrator's decision on the question of "the difference between the offer made by management and the demand [30 per cent] made by the union." To encourage collective bargaining in the interim, he suggested that if prior to the arbitration hearing any of the companies should arrive at a settlement, they could withdraw from the arbitration.[36]

The proposal was accepted by Sinclair subject to its acceptance by the other companies. The union also accepted it. However, by October 3, 10 companies had filed reservations to the arbitration proposal of such a nature that in the judgment of Mr. Schwellenbach they constituted rejection. Thus the conciliation effort finally ended. The main reservations of the companies were: (1) that the arbitrator fix the scope of the award as between zero and 30 per cent and not between 15 and 30 per cent as the Secretary had proposed; (2) that, if the arbitrator went beyond 15 per cent, the Secretary would cooperate with the

[34] New York *Times*, Sept. 28, 1945, pp. 1, 13; Sept. 29, 1945, p. 1.

[35] *Ibid.*, Sept. 30, 1945, pp. 1, 3.

[36] *Ibid.*, Oct. 1, 1945, pp. 1, 3; Oct. 2, 1945, pp. 1, 15.

companies in obtaining price relief. Commenting on these reservations, Mr. Schwellenbach stated that, since the companies had already indicated willingness to grant a 15 per cent increase, he had wished to have the arbitrator assume the 15 per cent as having been granted. "I never understood that you arbitrate agreements," he said. "I thought you arbitrate differences. The difference between the parties was 15 per cent."[37] But a trade paper treated the proposal as a "command" to make a flat increase of 15 per cent "and thereby to set arbitrarily without hearings or study a new nation-wide wage level for themselves, the oil industry, and undoubtedly the United States." Moreover, it would "inaugurate the radical change of considering the conference a bargaining by the entire oil industry with the International Union for a country-wide wage scale."[38]

V

Following rejection of his arbitration proposal, Secretary Schwellenbach recommended that the President take possession under the War Powers Act of the facilities of the oil companies affected by stoppages. The appropriate papers apparently had been ready for some time and all that remained was to fill in the names of the companies and the designation of the properties. On October 4, the President issued Executive Order 9639, which authorized the Secretary of the Navy to seize 53 "petroleum operations" and to operate them or arrange for their operation. Responsibility for their operation was delegated to Vice Admiral Ben Moreell, chief of the Navy Bureau of Yards and Docks, who enjoyed "an excellent reputation among labor organizations."[39]

This was the first important instance following V-J Day of government seizure of properties in connection with a labor dispute. Inability of the plants in operation to supply "both the direct military requirements and the minimum essential war supporting activities on the home front"[40] was the main justification for the action. Possession was taken of one refinery merely because it was picketed and not because of an active strike by its employees. In the case of another refinery, where the employees were represented by an independent union which was not on strike, seizure was effected because production had been halted as a result of threatened picketing.[41]

Although Mr. Schwellenbach and Reconversion Director Snyder had urged seizure, the action was not endorsed by all government officials. The chairman of the War Labor Board, Dr. George W. Taylor, had advised against it, and the

[37] *Ibid.*, Oct. 4, 1945, p. 14.

[38] Editorial, *National Petroleum News*, Oct. 10, 1945. This issue also gives the texts of the oil companies' statements on the arbitration proposal, pp. 63–67.

[39] New York *Times*, Oct. 4, 1945, p. 1. According to the *Times*, Oct. 5, p. 1: "It had been generally assumed that the President would ask the Petroleum Administrator for War to take over the oil properties. The Administration, however, was apparently sensitive to what the oil workers would say, for the PAW had been criticized by the Union as a haven for oil executives!" The PAW, incidentally, did not have the formal labor representation in its organization such as was found in the WPB.

[40] *Ibid.*, Oct. 5, 1945, p. 1.

[41] Navy Department, *Press Release*, Nov. 9, 1945.

public members of the WLB had considered it to be the "worst move" that the President could make. Board members were fearful that seizure would mean continued government intervention in management-labor disputes. Others who opposed seizure feared that the President's action was in the direction of compulsory arbitration, but proposed no alternative course.[42]

The union leadership responded to the order by calling upon its membership to return to work and cooperate with the Navy in restoring operations. In a public statement the union emphasized that its members were returning "to work for the United States government" but were still on strike against the companies.[43] The statement observed that "it was the oil industry and not the Union that refused to settle through arbitration" and interpreted the seizure action as "an active retaliation" against the industry. Finally, it noted that the union's cooperation with the Navy in operating the plants imposed upon the government "the responsibility of seeing that the just demands of the oil workers are met." As the 43,000 striking oil workers began gradually to return to their jobs the union evaluated strike developments in terms of victory. Its newspaper listed the following achievements:[44]

1. Under the banner of [the union] was conducted the first national strike in the history of the oil industry.
2. For the first time the oil industry met in conference with the union.
3. The oil companies were placed in the position of defying the United States Government by refusal to accept arbitration.
4. OWIU established the groundwork for industry-wide bargaining.
5. OWIU is leading labor's fight the nation over for 52–40, no wage cuts, and preservation of the American standard of living.

But the government did not view its responsibility in the light the union desired. Acting Secretary of the Navy Hensel announced that although the Navy would operate the plants, settlement of the strike was "out of the Navy field." This was taken to mean that the Navy would not negotiate with the union and would not avail itself of the War Labor Disputes Act to petition the War Labor Board for approval of the 15 per cent wage increase offered by some of the companies. Presumably, settlement would be left to negotiations between the parties.[45]

The union had been confident that the President "would immediately set up machinery" to settle the dispute. When the government failed to take further action, the union complained that the Administration had "shirked its responsibility to press for a settlement" and appealed for the establishment of "machinery."[46] The optimism with which the seizure action had been initially greeted

[42] New York *Times*, Oct. 5, 1945, p. 4.

[43] Quoted in New York *Times*, Oct. 6, 1945, p. 4.

[44] *International Oil Worker*, Oct. 1945, p. 1. The union paper also claimed that "thousands of new members are flocking" into the union.

[45] New York *Times*, Oct. 6, 1945, p. 2.

[46] *International Oil Worker*, Nov. 15, 1945, p. 7.

soon faded. Thus, the November issue of the union newspaper states (page 2):

> Seizure of the oil industry was wholly unwarranted....
> The Navy now threatens to remain in indefinite possession of these plants because the Administration has provided no method of settling the dispute and will not allow the Union to settle it through economic action....
> Unable to get the oil companies to accept an arbitration proposal which the Union had reluctantly accepted, President Truman therefore shackled the hands of the Nation's oil workers by seizing certain big plants.

The industry apparently did not find seizure distasteful. A writer in the *National Petroleum News* stated that "probably no better emergency move could have been found than seizure." And an editorial notes with relief that the oil industry "seems to be free for the moment of the bullying and trickery of the Truman administration, its Labor Secretary Schwellenbach and his 'conciliators'." It recognized, however, that "the wage question still has to be met even though the Navy were to keep the plants forever."[47]

VI

During the weeks that followed seizure, the absence of positive collective bargaining developments was reflected in a virtual news blackout on the dispute.[48] There were reports that the President was postponing further action in the belief that the forthcoming Labor-Management Conference might be able to handle the oil situation.[49] When the conference opened on November 5, the union reminded the President in a full-page "open letter" that it had "accepted your intervention in good faith" and urged him to "set up immediately machinery" to settle the controversy.[50] The union newspaper complained that its attempts to reach agreements with the companies on a local level had been unproductive. The companies were unwilling to increase their 15 per cent offer "until their competitors had committed themselves to a similar increase."

In mid-November the union appealed once more for a joint conference with all the affected companies. On November 19, a "White House-Navy-Labor Department" conference was devoted to the oil dispute. Recognizing that the Labor-Management Conference would not provide a mechanism for handling the dispute, the government conferees proposed the creation of a fact-finding board to investigate the dispute. Both the oil companies and the union were canvassed by the Labor Department on this proposal and found it acceptable.

Thus the Oil Panel, an emergency device in an emergency situation, was created by an Order of the Secretary of Labor on November 27, 1945. "The

[47] Oct. 17, 1945, pp. 8–11.

[48] Newspaper references were confined to reports of the progress of the back-to-work movement and to paid advertisements such as that of the Socony-Vacuum Corporation, the theme of which was: "Socony-Vacuum Did Not Decline Arbitration. . . . It is not arbitration . . . when the arbitrator begins by giving one party half of what is demanded."

[49] *National Petroleum News*, Oct. 17, 1945, p. 11. The conference, however, did not take up the oil situation nor did it produce a mechanism which could have handled it.

[50] *Washington Post*, Nov. 5, 1945, p. 11.

national interest", the Order reads, "requires settlement of the labor disputes" at the seized facilities, "and return thereof to their owners." The Panel's three members "representing the public interest" were directed to "investigate the labor disputes relating to the wages which should be paid on the resumption of a 40-hour week" in the seized facilities and to submit to the Secretary within 30 days recommendations conforming to the wage and price stabilization policies contained in Executive Orders 9599 and 9651.[51] Like the fact-finding boards subsequently appointed in connection with other disputes,[52] the Panel's task was to determine the facts and make recommendations for settlement within the limitations of the government's wage-price policy. In essence, this was the quasi-judicial function of applying wage-price policy "with reliance upon public opinion to force the conclusion of agreements on the basis of the recommendations made."[53]

The Panel met with the parties on December 4 in an executive session. Present were the Panel members (Frank P. Graham, a former member of the War Labor Board, Paul Eliel of Stanford University, and Otto Beyer, a consulting engineer), representatives of all but six of the companies whose plants had been seized,[54] and union representatives. In addition to formulating procedure for the submission of statements by the parties and the use of government data, several important questions were considered. The union indicated its intention to present extensive material covering the financial status of the companies, and company representatives asked that the Panel state its position as to consideration of financial data, including profits and ability to pay, in making its recommendations. December 17 was fixed as the day for the opening of public hearings.

In the meantime Vice Admiral Moreell explored the possibility of settlement through collective bargaining. Achievement of an "equitable settlement" between the union and a company which had "real significance" in the oil in-

[51] *Order* of the Secretary of Labor, Nov. 27, 1945. While the order "might be construed to limit its investigation to the refineries that have been seized," states a trade paper editorial, "the immediate practical effect will be against all branches of the oil industry," because a wage increase in the refineries "would be vigorously prosecuted by the CIO against employers in all other branches of the industry." *National Petroleum News*, Dec. 5, 1945, p. 8.

[52] Between Nov. 27, 1945, and Jan. 17, 1946, fact-finding boards were appointed in the automobile industry, steel, meat-packing, interstate bus transportation, and the manufacture of farm machinery.

[53] See H. M. Douty, "Wage Policy and the Role of Fact-Finding Boards," *Monthly Labor Review*, April 1945. Reprinted in Serial No. R.1835, p. 1.

[54] Representatives of the following companies appeared: Ashland Oil and Refining, Cities Service of Delaware, Atlantic Refining, Cities Service of Pennsylvania, Crown Central Petroleum, Magnolia Petroleum, National Refining, Pan American Refining, Pure Oil, Republic Oil Refining, Shell Oil, Sinclair Refining, Socony-Vacuum, Standard Oil of Ohio, Texas Company, Union Oil. The following companies did not send representatives: American Liberty Oil, Chalmette Petroleum, Elk Refining, Gulf Oil, Petroleum Specialties, Phillips Petroleum. According to Philip Brayton, executive assistant to the Oil Panel, five of the latter had declined invitations to the inquiry. None, however, registered any objection to its character. *National Petroleum News*, Dec. 5, 1945, p. 3.

dustry might "set a pattern" for the industry.[55] Thus he induced officials of the Sinclair Company and President Knight to confer with him in New York on December 12. Sinclair's 11 facilities occupied a significant position in the industry and the company had enjoyed fairly harmonious relations with the OWIU for more than a decade, having been the first major to sign a national agreement with the union.[56] On December 16, the Navy Department announced that Sinclair had settled with the union on the basis of an 18 per cent increase and that its properties would be released from Navy control.[57] Involved in the settlement were over 7,000 workers, or about 26 per cent of the hourly production workers in all seized refineries.[58]

At the December 17 hearing questions were raised as to the Panel's scope of inquiry and the precise relation of its recommendations to wage-price stabilization policy. After discussions with the Secretary of Labor and government officials concerned with economic stabilization, the Panel on December 21 announced its own rulings on these questions.[59] It also distributed to the parties a statement of policy issued by the Secretary of Labor for the guidance of the Oil Panel as well as for future panels. This statement both outlined the relation of the Panel to the government's over-all wage and price policy and gave instructions in regard to the question of company financial records and ability to pay. Since the Panel "to the extent necessary" must satisfy itself that an employer could absorb a recommended wage increase without an increase in prices, it must "necessarily inquire into the issue of the employer's ability to pay." A company's failure to contest its ability to pay could be taken by the Panel as establishment of ability. However, the statement declares that even though no plea of inability is made, the Panel must satisfy itself that a specific wage increase is absorbable. Hence, the Panel might consider it necessary to look into production and other costs and profits. Past earnings as well as the current position should be used by the Panel in determining ability to pay.[60]

Following presentation of the Panel's rulings and the statement of policy several company representatives and union representatives requested a recess until January 7, 1946, to enable the parties to resume negotiations.[61] When the

[55] *National Petroleum News*, Feb. 20, 1946, p. 5.

[56] Prior to the Sinclair agreement on June 1, 1934, there were no known union agreements in force in refineries of the larger companies (testimony of H. H. Anderson before TNEC; *Hearings*, Part 16, Sec. III, p. 9004).

[57] The Sinclair Company also agreed to pay shift differentials of 4 and 5 cents, which had "a tremendous bearing upon the willingness of the Union" to accept the 18 per cent (statement of Pres. Knight in *Proceedings* before the Panel, Jan. 8, p. 298). The settlement represented a substantial reduction in the union's original demand, and was the most heatedly debated issue of the 1945 convention. A motion to reject it failed to carry by only one vote (*Monthly Labor Review*, April 1946, p. 607). Yet the union exploited it as a major victory—as "the first breach in the wall . . . erected by Standard Oil through its various affiliates and subsidiaries" (*International Oil Worker*, Dec. 1945, Extra ed., p. 1).

[58] National Wage Stabilization Board, *Research and Statistics Report*, No. 2, p. 5.

[59] *Report of Proceedings before the Oil Panel*, Dec. 21, pp. 72–74.

[60] Exhibit C, *Oil Panel Report*.

[61] *Transcript of Proceedings*, Dec. 21, 1945, p. 82. One representative reported the re-

Panel notified the companies on January 2, 1946, that hearings would be resumed on January 7, 1946, 14 companies wired that they were negotiating with the union and preferred to continue with collective bargaining. However, President Knight requested continuation of the hearings because, apart from settlements at two refineries, he was unable to report progress.[62]

The hearings were reopened on January 7 and closed on January 8. Representatives of the union and two of the companies submitted statements and participated in cross examination. The Acting Commissioner presented the results of BLS studies relating to take-home pay, straight-time average hourly earnings, and ability to pay.[63]

The union position set forth in its opening statement before the Panel may be summarized as follows:[64]

1. Some companies violated the obligations of the National Labor Relations Act and their obligations to the union in making unilateral announcements as to wage increases without negotiations with the union.

2. Under the prevailing government wage-price policy the Panel could "recommend any wage increase which, if negotiated as a result of collective bargaining, would not require a price increase."

3. A reduction in take-home pay would be deflationary. A general increase of 31 per cent in basic rates, or 36 cents an hour (without a price increase), would offset the loss in take-home pay.

4. The companies involved were largely representative of the industry and their financial position was so strong that a price increase would be unnecessary. Since "the labor costs of refining are only 6.5 per cent of operating costs, the prospective savings in (a) overtime, (b) taxes, and (c) through higher productivity will offset the increase in labor cost resulting from the wage increase requested to the extent of 31.6 percent."

5. Straight time hourly earnings had increased only 21 per cent from January 1, 1941, to July 1945, while the cost of living had increased 45 per cent.

The principal points made by the companies in briefs and statements in the course of the proceedings may be aummarized as follows:[65]

1. The Panel had no legal sanction and no jurisdiction in these cases.

2. Most of the other points were aimed primarily at the question whether the companies' ability to pay a wage increase should be considered. If it should be considered, then each company should be heard separately on account of the competitive relations of the companies. If a company made no plea that it was unable to pay, then evidence

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sumption of collective bargaining negotiations by his company, another reported that the foundation had been laid for negotiations, and it was rumored that at least one company besides Sinclair had reached an agreement with the union.

[62] *Ibid.*, Jan 7, 1945, pp. 95–100. The *National Petroleum News* on Jan. 9, 1946, stated that the OWIU had been "putting pressure" on locals for settlements but "it seems that by continual pounding," the International "did such a good selling job on holding out for 30 per cent that it is now having difficulty persuading locals to settle for less."

[63] *Transcript.*, Jan 7 and 8, 1946, pp. 134–338.

[64] *Oil Panel Report*, p. 8.

[65] *Ibid.*, pp. 8–9.

thereon should be considered irrelevant and should not be received. The companies pointed to the difficulties in determining a firm's ability to pay. Small companies would be put out of business if an over-all wage policy was based on the financial strength of the majors.

3. Under Executive Orders 9599 and 9651 the only valid ground for an increase would be the increase in the cost of living above the increase in the average straight time hourly earnings between January 1, 1941, and July 1945 but this was more than compensated for by the companies' offer of 15 per cent.

On January 12, 1946, the Panel recommended an 18 per cent wage increase without a price increase at the time of resumption of the 40-hour week as the basis for settling the remaining disputes. The Panel found that, in general, "the financial position of the industry is strong and has been strengthened in various ways during the war period"; that the level of refinery operations would probably remain high during 1946; that labor costs represent a relatively small proportion of total cost in refinery operations—the recommended 18 per cent increase would increase total refinery operating costs by about 1.1 per cent.[66]

The reasons for the recommendation of 18 per cent may be summarized as follows:[67]

1. An average increase of 9.5 per cent was required to compensate the workers for the difference between the increase in their straight time average hourly earnings and the increase in the cost of living since January 1941.

2. However, "a combination of considerations—less premium overtime pay, higher productivity, and settlements already negotiated through collective bargaining—indicate that an amount in excess of that due because of the increase in cost of living should be granted . . . This additional increase . . . should be 8.5 per cent."

The 9.5 per cent cost of living adjustment was determined arithmetically. However, the Panel did not apportion quantitatively the weight of each of the "considerations" responsible for the additional 8.5 per cent. Only qualitative justification is given, e. g.:[68]

1. The return to a 40-hour week would result in a saving in premium overtime payments, which would mean a saving in the average hourly rate.

2. "In an industry as dynamic as petroleum refining, there would appear to be reasonable expectation of productivity increases of some magnitude in the immediate postwar years."

3. The fact that Sinclair and "several important companies" had agreed to an 18 percent increase was "an important consideration" in the Panel's deliberations, and was given "great weight." Since these agreements had been arrived at through collective bargaining, they suggested to the Panel an "equitable and acceptable settlement" of the wage issue.

The Sinclair settlement obviously goes far toward explaining the Panel's recommendation. A recommendation above or below 18 per cent would have

[66] *Ibid.*, pp. 13–17.
[67] *Ibid.*, p. 18.
[68] *Ibid.*, pp. 13–17.

created further discord and probably would have indefinitely postponed settlement, thus delaying release of facilities to their owners. The compelling reasons that might have dictated a recommendation that deviated from the Sinclair settlement could only have been found after a meticulous examination of the current and prospective financial position of the 22 companies, their depreciation policies and expansion programs as well as other aspects of corporate policy. In the limited time allotted to it, and pressed by the urgency of getting the government out of the oil business, the Panel groped for a point about which collective bargaining might make progress. Thus the Sinclair settlement, which affected a sizeable proportion of the seized facilities, served as a *deus ex machina*.

An industry spokesman regarded the recommendation as "reasonably fair to both parties" but criticized the Panel's consideration of "ability to pay";[69]

> Had the oil companies and the unions not already been pretty well along on agreements on the 18 per cent increase in their individual negotiations, which made detailed study unnecessary, one cannot help but wonder how far the panel would have gone in further 'conjectures' as to the industry's 'ability to pay'.

The union, on the other hand, questioned whether the Panel had "appraised impartially the industry's ability to pay and the workers' needs." The fact-finding approach had been reduced to an absurdity, the union stated, for "obviously the Panel accepted a figure reached by the Union and several companies as an easy way out of its job and then supplied the necessary statistics to justify its conclusions.[70]

Following issuance of the report, and with the aid of a "task force" established by the Navy Department, agreements were brought about fairly rapidly.[71] At the end of January 1946 the *National Petroleum News* observed that the industry's labor difficulties were "rapidly reaching satisfactory settlement by private negotiations and entirely without the 'aid' of federal labor agencies" and the union paper reported that Standard Oil "subsidiaries" were signing up with OWIU for 18 per cent. By April 1, 1946, all the properties had been released to their owners.

At the end of March 1946 the National Wage Stabilization Board studied the petroleum industry wage structure in order to determine whether the Panel's recommendation had been followed widely enough to establish it as a pattern for the industry. The Director of Wage Stabilization analyzed wage changes in nine of the largest companies since "inquiry of people who are connected with the petroleum industry shows that the large companies . . . regularly follow the same pattern with respect to wage adjustments." It was found that these companies

[69] *National Petroleum News*, Jan. 16, 1946, p. 15.

[70] *International Oil Worker*, Jan. 1946, p. 1.

[71] Besides the wage settlement many of the agreements included adjustments in shift differentials, maintenance of membership, check-off, no strike clauses, job classifications, and seniority rights. NWSB, *Report No. 2*, page 8.

had granted an 18 per cent average increase in basic wage rates in all branches of the industry since V-J Day.[72]

The union's disappointment in the recommendation was assuaged in part by its achievement in setting the wage pattern. "Now is the Springtime of our opportunity," stated an editorial in the March 1946 number of the union newspaper:

> For the first time, our Union has set the wage scale in oil, topping Standard's 70 year reign over the wages of workers in this industry . . .
>
> Now is the time to push ahead on all non-union fronts . . . The big fight to complete Standard Oil organization must be completed.

In July 1947 the *National Petroleum News* evaluated the strike as follows:

> Two years ago the oil industry took the brunt of the . . . administration's decision to get for union labor . . . , a flat wage increase of 30% . . . The oil industry, and all America, can well be proud that the oil industry stood up against this pressure and finally got the first postwar wage increase that was followed by all industries, down to roughly 18%.

VII

The oil strike established precedents in oil industry labor relations and contributed significantly to the pattern of post-V-J-Day national labor policy.

1. It was the first significant wage dispute and reflected most of the wage issues of the reconversion scene after V-J Day. The OWIU strike action to maintain wartime earnings was the first important move in the CIO's postwar wage campaign and the Sinclair settlement represented the first settlement of a major wage dispute that had involved strike action.

2. It was the first nation-wide strike in oil industry history.

3. Although its effort to engage a majority of the major oil companies in bargaining on an industry-wide basis was unsuccessful, the union succeeded in obtaining joint conferences with most of the majors. Previously, with the exception of the Sinclair Company, collective bargaining had been limited to local, plant, or state-wide negotiations.

4. Taking into consideration the exaggerated claims that may be expected from partisans in a labor dispute, the Union's appraisal of the strike's significance ("OWIU Defied Standard Oil and Won") is not without a kernel of truth. The union was able to force major companies to adjust wages upward after they had made the same offer that had been accepted by independent unions in plants of the Standard Oil Company (New Jersey).

5. Although the government sought gradually to relinquish wartime controls, the oil strike forced its active participation in settling the dispute. The fact-finding procedures adopted initially to review the issues and formulate recom-

[72] Paul Guthrie, *op. cit.* pp. 4, 6. The nine companies studied were: Standard Oil (New Jersey), Cities Service, Socony-Vacuum, Standard of Indiana, Standard of California, The Texas Corporation, Gulf Oil, Shell Union, and Sinclair.

mendations for settling the oil strike were employed to deal with subsequent stoppages during the reconversion period.

6. The recommendations of the Oil Panel and the similarity of the award by panels in other disputes helped to develop the approach to wage change which has been described as "emphasis on 'pattern' or equivalence of change in the same industry or related industries or in the same labor market area" and which was enunciated in Executive Order 9697, a little over a month following the Oil Panel's recommendation.[73]

[73] H. M. Douty, *op. cit.*

IMPACT OF WORLD WAR II ON INTERNAL WAGE RATE STRUCTURES*

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Internal wage problems were brought into sharp focus during the years 1942–1945 by the conditions of a wartime labor market. Acute labor stringency placed management under severe pressure to rationalize wage structures in the interest of reducing turnover and dissatisfaction. The stabilization program of the National War Labor Board gradually closed the door on general wage increases, forcing both management and labor to turn increasingly to specific internal rate adjustments. At the same time management's normal resistance to wage increases dissolved as price competition was replaced by fixed price or cost-plus-fixed-fee war contracts. The period is thus a fruitful one for the study of wage rationalization and of the difficu ties in reconciling interplant wage level stabilization with widespread internal adjustments.

In this paper, a review of wage rationalization during this period will be largely confined to four types of problems: (1) specific individual or job rate inequities (2) differentials between men and women, (3) differentials between incentive and nonincentive workers, and (4) individual worker advancement. The discussion of wartime stabilization as it affected internal wages will be limited to three major aspects of the National War Labor Board's program: (1) substandard policy, (2) cost of living adjustments, i.e., Little Steel Formula, and (3) labor market area "bracket" policy.

I

Prior to 1942, the development of rational wage structures and sound wage administration practices in American industry was confined to a relatively few progressive companies. Internal controls were, in general, decentralized and received secondary consideration from top management and to some extent from labor. As a result, thousands of establishments had never formally described, classified, or standardized their jobs. Wage structures were replete with "random" and "personal" rates, inequitable differentials between individuals or groups of individuals in the same or similar type of work. Compensation often did not reflect with reasonable accuracy the skill involved.[1]

The ill consequences of this negligence descended on management within 12 months after conversion to war production. Faced with the necessity of hiring and training thousands of new workers amidst growing labor scarcity, of setting

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[1] George W. Taylor, address, American Management Association, New York City, April 11, 1945.

up new jobs, simplifying old jobs, and reducing the causes of excessive job shopping, management scrambled to eliminate intraplant inequities and put some kind of order into wage structures. Union leadership naturally joined in.

No sooner had the National War Labor Board been established in 1942 to control wage changes than it found itself directly in the path of this overhauling process.[2] Under ordinary conditions the problem of correcting inequitable wage structures would have been formidable. Under the urgencies of wartime it was staggering. How could a government agency hope to evaluate hundreds of proposals involving an infinite variety of intricate intraplant wage details?

Combining insight with expediency, the Board placed the burden of proof on the individual applicant, requiring him to provide a descriptive analysis of both existing and proposed wage relationships. The effect of this procedure was salutary. In the mere process of describing and classifying jobs, individual or job rate inequities became apparent.

If acceptable evidence of an existing inequity was submitted in a voluntary application, the Board was generally fairly liberal in granting cents-per-hour adjustments. In dispute cases, the Board either directed specific adjustments in job rates, thus imposing involuntary arbitration on the parties, or else granted a lump sum amount and directed the parties to make the adjustment in specific job rates. In a majority of cases, the second alternative was followed. The Board wisely tried to avoid, whenever possible, directing specific intraplant adjustments on the grounds that no government agency should ordinarily attempt such a task.

In granting lump sum amounts to eliminate specific inequities, the Board took advantage of its position to require the voluntary applicants or disputants to develop formal job classification and labor grading.[3] As a result, there was un-

[2] The Board was established on Jan. 12, 1942, by Executive Order 9017 and was limited to wage and salary adjustments arising from labor disputes which might interrupt "work which contributes to the effective prosecution of the war." Executive Order 9250, Oct. 3, 1942, extended the Board's authority to control all wages and salaries under $5,000, with certain exceptions. (See General Order 4, adopted Oct. 9, 1943, amended Sept. 10, 1943, and General Order 9, adopted Oct. 30, 1942, and amended May 29, 1943.)

Executive Order 9328, April 8, 1943, limited authority to grant general "across the board" increases, but did not fundamentally alter the Board's authority over intraplant inequities. (See opinion of George W. Taylor in *Thirty Michigan and Northern Wisconsin Lumber Companies, et al.*, Cases # 583, 662, 663, 11-31-C, 11-45-C, 2711-CS-D, July 8, 1943.) The May 12, 1943 Directive Order of the director of Economic Stabilization, in clarification of the April 8, 1943, order, limited somewhat the Board's authority over intraplant adjustments.

[3] In some disputes, the Board directed that standardized job classification be established through collective bargaining and set up machinery and guides for achieving that end. For example, American Locomotive Company (Case #1045): A four-man committee composed of two representatives of management and two from the union was established for the purpose of revising a job classification plan in effect with only slight changes for 40 years. In the event the parties were unable to resolve their differences, they could request the Board to appoint a fifth member of the committee as impartial umpire. In the Rockford Drop Forge Company case (Case #635), the Board provided for arbitration if the parties could not agree. In Carnegie Steel Corporation et al. (Case #111-6230-D), Nov. 24, 1944, the Board set down "guideposts" to be followed by the parties. In Pettibone-Mullikin

precedented use of job evaluation and time study techniques and very real progress was made in eliminating "personal," "haphazard," and "random" rates, and in reducing excessive job classifications, grades, and titles.[4]

Under the pressure of emergency, the Board accepted many proposals for correction of specific inequities which were not inequities at all but ill-disguised efforts to obtain general wage increases.[5] Such piecemeal wage adjustments, hastily proposed in an effort to overcome manpower problems, caused many plant wage structures to deteriorate, a development which could have been avoided by a firmer policy.

Despite many questionable decisions, the Board should be given credit for its ingenuity and skill in many cases where direct intercession was necessary. A well-known example was the airframe industry. Early in 1943, the wage structures of West Coast airframe companies were in chaotic condition as a result of unprecedented expansion. Hundreds of new occupations were improperly aligned with the original wage rate structures. In the struggle for manpower, new workers were paid higher rates than older employees for the same work.[6] The Board ordered the Southern California Airframe Industry evaluation plan adopted by all West Coast airframe plants.[7] Despite predictions

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Corporation (Case #326), the Board set 74¢ an hour as the lower "anchor" rate (unskilled) and $1.20 for the highest skilled occupation as the top "anchor." Intermediate rates were to be determined by job evaluation and negotiation.

In other cases, the Board merely recommended that standard classifications be determined by collective bargaining and left up to the parties how the task should be done. For example, Chase Bag Company (#3091-A), William White and Company (#AR-45), and North Electric Manufacturing Company (#481).

Occasionally the Board provided for technical assistance to the parties; e.g., Armstrong Cork Company (#2471-D), Art Metal Company (#395).

[4] For example, in the New York Baking Companies (#254), the Board approved a reduction in job titles from 220 to 45. In the Wright Aeronautics Corporation (#111-1453-O), labor grades were reduced from 28 to 13.

In the American Locomotive Company, Dunkirk, New York (#111-1379-D), the Board ordered a reduction in the number of individual rates, which in some departments were as high as 40. In the Four Meat Packing Companies (#186, 181, 189, 188, 245, 187), the Board directed the parties to negotiate the elimination of wage rate inequities and subsequently established the Meat Packing Commission to achieve this end. Over 100,000 job rates were examined. For a review of the commission's work in striving for "simplification, standardization, non-personalization and re-evaluation" of the industry's rate structure, see Clerk Kerr, *The Meat Packing Commission, 1945–1947*, Feb. 1947, Chicago, Ill. (dittoed).

In the Western Union Telegraph Company case (#368), the Board found variations within rate ranges of from 72 to 447%. The company said these represented variations in skill. The union contended they reflected favoritism. The Board awarded an increase to total 15% of aggregate straight-time hourly rates in effect within the bargaining unit, the increase to be allocated so as to reduce the width of rate ranges and develop a more rational wage structure.

[5] One firm made 124 separate applications to a regional board for specific inequity adjustments.

[6] In one classification some workers received as low as 75¢ and others as high as $1.15.

[7] West Coast Airframe Companies (#174 et al.), March 3, 1943. The SCAI plan brought about standardization and simplification. The number of job titles was reduced from 1154

of failure by both management and labor, the plan worked reasonably well, reducing turnover and grievances to the benefit of rising aircraft output.

Somewhat similar action was taken in the fluorspar industry of Western Kentucky and Southern Illinois. Chactic wage structures resulted in excessive job shopping and out-migration to such an extent as to imperil expansion of a vital war industry. Following an analysis of the industry's job structure, the Board reduced the number of job classifications from 186 to 85 and allocated the 85 to 13 labor grades. The new wage schedule was applied at first to six leading companies and subsequently to the rest of the industry.[8] The result was a striking reduction in grievances and job transfers and an improvement in output.[9]

Early in the Board's program, job evaluation approval often resulted in very substantial increases in job rates. This prospect became more attractive as stabilization was tightened, 1943–1944. In order to protect stabilization the Board ruled that "the average of new or proposed job rates resulting from a job evaluation plan (usually weighted by the number of employees who would be working at the jobs) should not *appreciably* exceed the weighted average of the employees' rates at their old jobs."

Later the National Board issued instructions not only limiting adjustments to a few cents, plant-wide, (1–2 cents commonly used), but making previous inequity grants deductible.[10] This step reinforced stabilization but did not prevent some large companies from using their "two cent account" to obtain increases well above one or two cents for workers in "trouble departments" or key jobs.

In applications involving rate differentials between men and women, the Board adopted a general "equal pay for equal work" policy.[11] This was relatively easy to apply when the evidence clearly indicated women were doing work comparable

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to 291 and the latter allocated to 10 labor grades. The Board denied extension of the SCAI plan to some airframe plants on the grounds that it would unstabilize local labor market rates. Notable was the denial in the North American Aviation case (#8-8102), Waco, Texas.

[8] Crystal Fluorspar Company et al., (#2708-CS-D, #2707-CS-D, and #2592-CS-D), July 2, 1943.

[9] In the Atlantic Coast Wage cases (#111-2277-D, #111-2612-D, and #111-2685-D), the Board established classifications and set rates for four major shipbuilding jobs covering 75% of the workers. A skeleton rate pattern was established for more than 200 other occupations.

[10] In addition to holding the weighted average of newly evaluated job rates to "no appreciable" increase over old rated structures, the National Board instructed its regional boards to avoid approving new job rates if they would unstabilize a given labor market. This was to hold true even if the new "evaluated rate may be a valid rate in terms of the particular evaluated rate structure."

[11] Set forth in such early decisions as Norma-Huffman Bearings Company (#120) and in General Order 16, which gave employers the right to equalize or adjust the "wages or salary rates paid to females with the rates paid to males for comparable quality and quantity work on the same or similar operations."

The Board also extended the principle to differentials based on race (Southport Petroleum Company, #2898-CS-D), June 5, 1943; differentials based on age (E. H. Sheldon Company, #301); differentials based on superannuation or incapacitation (Pettibone-Mulliken Corporation, #326).

to that of men but receiving substantially lower rates of pay. The Board consistently eliminated the differentials.[12]

More difficult were problems arising over the replacement of men by women in jobs that had been traditionally performed by men. In such cases, it was necessary to determine the extent to which the replacement was accompanied by job dilution. If the evidence for a particular type of work indicated women displayed certain "physical aptitude limitations which involved extra costs for supervision, set-up or carry-off" or which involved "setting lower production or performance standards," the Board directed such charges should be offset against the rates paid to women and proportionate rate differentials established. If only slight or inconsequential changes in job content occurred, no wage differentials were appropriate.[13]

The Board was constantly confronted with the fact that some companies tended to use slight changes in job content as a basis for grossly disproportionate differentials. On this point the Board said:

> . . . the assignment of the heavy parts of a job to men may be a division of work and a specialization of tasks which may frequently be made without any increase in unit labor costs, even though the female employees continue to receive the established rate for the operation. In other words, such a method of performance may permit an increased production which offsets the added cost of the additional employees. In such cases, there is no sound basis for setting a differential rate against the female employees. It is pointed out that such division of tasks has often been used on jobs manned entirely by male employees as a means of reducing unit costs while maintaining hourly rates. There are sound reasons, therefore, for guarding against the use of the procedure to cut women's rates when the "extra" labor for heavy work does not increase unit costs of production.[14]

In determining the extent of job content dilution, the Board urged the utilization of job evaluation and time and motion studies and directed that subsequent differences in labor-management disputes be subjected to grievance machinery with arbitration as a final step.

One interesting development was the attempt by some of the Board's agencies to use the intraplant equal pay principle to eliminate interplant differences. The West Coast Lumber Commission found women in different plants in the same labor market doing comparable work but receiving widely varying rates of pay.

[12] For example, in the Brown & Sharpe Manufacturing Company (#101), Sept. 25, 1924, the company proposed to pay women up to 20% less than men for comparable work in the same occupation. The Board removed all differentials on the ground that "there is no proof, scientific or other, that women are 20% less capable than men all the time."

[13] In the General Electric (#111-17208-D) and Westinghouse (#111-17809-D) cases, Dec. 12, 1945, the Board set up a special inequities fund of two cents to be allocated through collective bargaining to reduce the "disparities between men's and women's rates." Of interest was management's contention that differentials were justified on grounds other than job content. The contention cited such "sociological" factors as (1) the transient character of women's service, (2) relative shortness of their activity in industry, (3) differences in environment required, (4) extra services needed, (5) overtime limitations, (6) "community practices."

[14] Brown and Sharpe Manufacturing Company (#101), Sept. 25, 1942.

The commission ordered the differentials eliminated.[15] The Board reversed the commission, stating the rates between men and women "developed by prewar collective bargaining are presumed to be correct in relation to the other jobs in the plant." In effect, the Board said intraplant inequities between men and women should be corrected, but interplant inequities could not be removed in wartime if established by prewar collective bargaining. This apparently inconsistent policy arose from the Board's desire to curb the use of the equal-pay principle to grant excessive and widespread general wage increases and illustrated the constant clash between wage stabilization and internal wage rationalization.

Under the stabilization program job rates could not be increased without Board approval. On the other hand, incentive earnings could increase as a result of factors quite outside War Labor Board control, such as (1) greater worker effort, (2) longer runs of standard items,[16] (3) "loosening" of incentive systems (removal of penalties for damaged materials, lost time, etc.), (4) improvements in technology, (5) improper or hasty timing of jobs.[17]

When earnings of incentive workers advanced much more rapidly than those of nonincentive, traditional differentials were upset and both labor and management were confronted with severe internal dissension. The hourly rated maintenance workers objected not only to the disparity in earnings but to the fact that greater output of incentive workers often imposed a heavier work load. Old time hourly rated journeymen were particularly incensed when new, temporary war workers, "green peas," received higher earnings on incentive work after only a few weeks on the job.

In an effort to preserve internal peace, both management and labor appealed to the Board to eliminate or greatly reduce widened differentials between the two groups. In dealing with this problem before the May 12 Directive Order, the Board followed a commonsense approach. If the wartime disparity was

[15] Northwest Match Companies (#2980, 2981, and 2982), Dec. 18, 1943.

[16] In prewar years employees might be asked to work on three or four different items in a given period. Each change meant a temporary slowing up in work tempo. During the war workers could often concentrate on only one item for long periods of time. This concentration permitted workers to build up speed and skill which in turn resulted in greater output per hour and hence greater earnings.

[17] Although outside the scope of this paper, students of wage problems will find of interest Board action to regularize and rationalize incentive earnings. The Board ordered specific guaranteed minima to protect workers against widely fluctuating piece work earnings (Jamestown Steel Partition Company, #430, and Dahlstrom Door, #431, Jan. 19, 1943). The Board directed an increase in guaranteed base rates and a corresponding reduction in incentive rates (Fred Medart Manufacturing Company, #2739-CS-D, Jan. 8, 1943). The "Board established guaranteed earnings for incentive workers not in a position to secure adequate incentive earnings due to downtime, set-up time, material shortage, experimental work, or temporary transfer (J. I. Case Company, #130, Dec. 23, 1942; Marlin Rockwell Corporation, #754, et al.). The types of guaranteed earnings included (1) the hourly (day) rate, (2) average hourly piece work earnings, (3) "at least 90% of average hourly earnings." The Board also directed that base rates must be set so as to yield a "reasonable" bonus (usually not less than 20 to 25%) and, if this was not forthcoming, piece rates should be restudied.

extreme, the Board granted some adjustment on the grounds that a "gross inequity" existed.[18]

If the disparity was moderate or small, the Board generally granted no adjustment, inasmuch as some differential favorable to incentive workers exists under normal conditions.[19]

After the May 12 Directive Order limited general increases, the Board occasionally granted increases only to specific nonproduction occupations to narrow the differential with rising earnings of incentive workers.[20] This altered former intraplant relationships within the nonproduction group and raised serious questions of internal alignment. The total effect of such decisions cannot be estimated, but they certainly were not altogether favorable.

More equitable was the Board's approval of bonus plans which permitted nonincentive workers to participate in whole or in part in the increased productive earnings of incentive workers.[21] A leading case was Westinghouse Electric and Manufacturing Company (#111-1394-D), January 14, 1944.[22] The plan finally

[18] For example, in the Spicer Manufacturing Company case, the Board found that production workers on piece rates had increased earnings by an average of 46¢ per hour, Jan. 1941 to Dec. 1942. The hourly rated nonproduction workers, skilled and semiskilled, had increased earnings only 23¢ and 20¢ per hour respectively during the same period. The disparity which developed amounted to approximately 25¢ per hour. The Board awarded 5¢ an hour increase to the hourly rated workers.

[19] In the Electric Auto-Lite Company case (#5-R-24 and #111-568-R), earnings of incentive workers increased 24¢ per hour from Jan. 1942 to Feb. 1943, but earnings of hourly rated employees rose only 17½¢. A disparity of 6½¢ existed. The union asked that the disparity be removed. A regional board denied an adjustment on the ground that the disparity was not excessive and hourly rated employees were receiving rates in line with "sound and tested rates in the area." The National Board affirmed the regional board's action and said:

"The disparity of 6½ cents in this case does not call for any increase if the disparity of 25 cents justified only a 5 cent increase in the Spicer case . . . to raise the base rates of hourly-rated employees to make them equal or nearly equal to the earnings of the piece rate employees . . . must be treated with the greatest precaution."

[20] For example, in one case the Board approved a 5¢ an hour upward adjustment for only 9 out of 28 nonproduction classifications (Borg-Warner Corporation, #6-6028, Jan. 14, 1944).

[21] In an early "experimental" case the Board approved an "over-all" type of incentive for the Grumman Aircraft Engineering Company (#13-285), Sept. 14, 1943. This plan provided that "if total production increases, then all employees will receive the same per cent of increased earnings even though their increased individual effort may vary." The Board became more reluctant to approve this type of incentive plan later on.

[22] In the Tennessee Coal and Iron and Railroad Company case (#4-1645) the Board approved a plan whereby nonproduction employees shared in a bonus formerly paid only to production workers. This was designed to compensate the nonproduction workers "for their increased effort in serving the production units."

See, also, Wright Aeronautical Corporation (#12-315 and #111-3066-D), March 18, 1944; Doehler Die Casting Company (#13-357), May 23, 1944; Grumman Aircraft (#13-285), Sept. 14, 1943; Chance-Wright Division United Aircraft (#1-5444), Nov. 16, 1943; Firestone Tire and Rubber (#5-13712), Feb. 2, 1944.

For approval of a "plant efficiency" plan by a regional board, see Electric Auto-Lite Company (#111-568-R), Feb. 5, 1944.

approved by the Board after acceptance by both management and labor provided that hourly rated nonproduction (indirect) workers receive a bonus directly related to the average plant efficiency of production (incentive or direct) workers. The former would receive no bonus, however, until the efficiency of production workers had reached 115 per cent of standard, after which the bonus would be paid in a ratio slightly less than 1 to 1. The production standard was based on past performance. In substance the plan permitted the indirect workers to share in rising plant efficiency but limited this sharing to actual increases in output or work load. The plan further protected stabilization policy in that it was operative only if there was no appreciable increase in production costs. The Board retained the right to modify or terminate the plan.[23]

To the Board's credit it should be said that many bonus plans proposed jointly by management and labor were denied on the ground that the bonuses were not based on greater effort.[24]

In the recruitment, training, and upgrading of thousands of new war workers, companies which had no formal wage plans were at serious disadvantage with companies which had formal wage structures and systematic wage administration. The former had to apply to the Board for each specific adjustment.[25] The latter could operate within an established plan. In addition, sharp differences in the hiring and retention of personnel arose between companies with wage plans of different types, i.e., single rates, rate ranges with merit progression, rate ranges with automatic progression, etc.

In an effort to overcome individual difficulties, companies with inadequate wage plans or none at all rushed to the Board with a great variety of job classification and accelerated upgrading schemes.

The Board's general attempt to protect stabilization and at the same time promote sound wage administration took the form of General Order 31.[26] The order provided, among other things, that (1) employers *with* established wage rate "schedules" could grant increases without Board approval provided the employer's schedule met prescribed standards;[27] (2) employers *without* estab-

[23] Modified May 13, 1944.

[24] Denials were also made on the ground that (1) new guaranteed rates were lower than existing rates and (2) production was subject to so many variables that determination of accurate standards was impossible. For denials of bonus plans based on special units of product see Atlantic and Gulf Steamship (#111-4743-D), June 28, 1944; Liberty Aircraft (#13-376), Feb. 1, 1944; Wynne Precision (#4-3055), Oct. 21, 1943. For denials of plans based on dollar value of product see Johnson City Foundry and Machine Company (#4-2586), Feb. 29, 1944; and Liberty Chair Company (#4-1943), Oct. 5, 1943.

[25] Cf. North Electric Manufacturing Company (#481).

[26] General Orders 5 and 6 provided that companies with established or approved wage schedules could make individual adjustments without Board approval. These orders were amplified by General Order 31 (issued May 29, 1943, and amended Aug. 18, 1943).

[27] As defined in G. O. 31 a wage rate schedule should include (1) job classification wage or salary rates or rate ranges, and (2) a plan for making individual adjustments within and between such wage or salary rates or rate ranges. (Certain limitations were placed on the amount and type of adjustments.) The term job classification was defined as follows:

"A job classification is a category of jobs or positions which are similar in nature and

lished schedules could adopt the Board's plan[28] and grant adjustments accordingly (individual increases could not exceed 10 cents per straight time hour in any year and the total of plant-wide individual increases could not exceed an average of 5 cents per straight time hour in any year); (3) employers without an established schedule and not desiring to adopt the Board's plan could apply for approval of a wage plan of their own by following prescribed "guides."[29]

The accomplishments of General Order 31 were many.[30] It put a brake on companies which were circumventing the Board's control of general increases by granting excessive individual adjustments without reference to any bona fide wage plan. The order prevented many applications from adding to the burden of the Board's analysis staff. It served as a guide for the elimination of haphazard rate structures in hundreds of industrial and commercial establishments.[31] The order made a constructive contribution to orderly wage administration which should carry over into postwar years.

The order obviously did not solve all the problems of individual worker advancement. An issue which remained controversial throughout the Board's

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content and in required amount of knowledge, skill, experience and responsibility. A job classification involves more than a mere description title; the classification must be clearly defined and described. Where jobs differ as to knowledge, skill, experience and responsibility, there should be different job classifications. . . ."

"A job classification rate exists where an employer pays a single rate rather than a range of rates for a given job classification. Jobs remunerable on a piece-rate basis are normally considered to be in single-rate job classifications."

[28] The term wage *plan* was defined as:

" . . . A plan is an orderly, definite procedure or a group of procedures for making adjustments, within specified limits, in the wage or salary rates of individual employees (a) within particular job classifications and (b) when they move from one job classification to another."

"Such a plan ordinarily includes (a) tests and procedures for determining whether employees are to be given individual rate adjustments; and (b) limits in the number of adjustments, the timing of adjustments, and the average in total amount of money to be granted in the adjustments over a given period of time. (It is not essential that a given plan includes *all* of the foregoing items.)"

The Board's plan included provisions for (1) merit or automatic length of service increases; (2) promotion in classification; (3) apprentice or trainee programs; (4) certain requirements and limitations to the above three items.

[29] The foregoing applied to employers of 31 or more employees. The order gave employers with 30 or fewer employees the right to make merit or length of service wage rate increases, within specified limits and under stated conditions, without Board approval. Employers of eight or fewer employees were exempt from the Board's jurisdiction.

[30] Major credit goes to Carroll R. Daugherty, director of the Board's Wage Stabilization Division, who presented G. O. 31 in draft form to the Board in Feb. 1943.

[31] A. L. Kress, assistant to the president, Republic Aviation, said: " . . . some of the things that Order 31 sets up for us to do are things that any well-managed company should have done a long time ago of its own volition. If we retain only that part that is good, build that into our permanent set-up, then we will have derived some benefit from this indirect attempt on the part of government, while aiming at stabilization and warding off inflation, to bring some order out of chaos in the rate structure of companies in this country." *Principles and Applications of Job Evaluation*, National Industrial Conference Board, Studies in Personnel Policy, No. 62, New York, 1944, p. 14.

existence was that of merit versus automatic (length of service) progression. In general, labor favored automatic progression, arguing that (1) it gave workers assurance that a definite plan of advancement would be followed, thus minimizing grievances; (2) plans for merit advancement are easily neglected and are subject to favoritism and discrimination; (3) more experienced workers are more efficient workers and, therefore, production costs need not necessarily rise as workers are advanced.[32] Obviously, also, highly accelerated plans guaranteed more increases than would ordinarily result from periodic merit review.

Management divided on the issue.[33] Some representatives opposed automatic progression on the ground that it would (1) result in only one rate as workers moved rapidly to the top of the range; (2) destroy workers' incentive to improve; (3) increase costs without increasing production "because some workers do not become more competent with experience." Other management representatives "went along" with automatic progression proposals. They said objective standards for determining merit advancement are hard to establish. Workers who move into a grade and cannot meet minimum requirements should be transferred or dismissed.

After reviewing the arguments pro and con, the majority Board opinion favored merit rather than automatic progression in most industries and pointed out that many automatic proposals appeared to be devices designed to "circumvent the wage stabilization program." The majority opinions' general philosophy was expressed as follows:

> There has been little or no evidence to show that difference in ability and performance generally vary primarily with the length of time on the job. Under such circumstances, automatic increases would provide wage adjustments irrespective of ability and performance.[34]

Following this general view, the Board refused to order automatic progression in most dispute cases.[35] If both management and labor favored automatic progression, the Board usually approved with reservations.[36] Highly accelerated progression plans were often reduced.[37] Instructions were issued to regional boards limiting the approvable rate of progression.[38]

[32] Public hearings, June 20, 1944.

[33] Public hearings, June 20, 1944.

[34] General Electric (#111-3264-HO), April 26, 1944.

[35] For example, the National Board reversed a decision of the Second Regional Board, New York City, which ordered a plan of automatic length of service increases for 570 skilled tool and die makers on the grounds that merit should be a primary consideration in such an occupation. See also, Bell Aircraft Company (#111-10667-D).

[36] The Board did hold that there are some occupations "where a fair and equitable measure of increased efficiency in a job may be the length of service," as indicated in Board approval of automatic adjustments for telephone operators.

[37] Cf. Western Electric Company (#13-456).

[38] In a resolution adopted in Sept. 1944 (revised Dec. 13, 1944), regional boards and industry commissions were limited to approving voluntary progression plans which "do not raise the employee to the top of his rate range faster than 12 months for unskilled jobs; 18 months for semi-skilled jobs; 24 months for skilled jobs." Automatic progression to the

In one leading case the Board found it necessary to prescribe a specific progression plan after the company and union had repeatedly failed to agree on "objective standards based on merit."[39] The Board's formula for ingrade advancement provided:

1. All employees whose performance is satisfactory shall be advanced to the midpoint of the range after a specified length of service. (Four months in unskilled, six months in semiskilled, and eight months in skilled jobs.)
2. Advancement beyond the midpoint shall be on merit as determined by the company.
3. Employees not advanced automatically to the midpoint, and employees seeking advancement beyond the midpoint on merit may appeal through the grievance machinery.

Several features should be noted in this formula. It assumed that normally most workers would be advanced to the midpoint of a range and have every reason to expect such advancement.[40] The burden of proof is on the company to explain why an individual worker is not advanced. Advancement, however, is not *fully* automatic. Beyond the midpoint, advancement would be on merit and the burden of proof is on the union or the worker to show why individual workers deserving advancement have been discriminated against.

Of the Board, management, and labor, none offered anything new in solving the problem of how to develop objective standards for merit increases.[41] In general, the Board denied labor's request for joint determination of merit increases, but recommended periodic review of worker performance. It held that objective standards should be drawn up by management with union participation. Grievance machinery should be utilized by labor to protect itself against management decisions considered inequitable.

II

The foregoing discussion was concerned with Board action in eliminating inequitable wage rate relationships. It should be noted that this feature of Board policy was a secondary development from the Board's basic assignment, that of controlling the *level* of wages. At this point, consideration will be given

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midpoint of the range was approvable "if the speed of the progression is not faster than four months for unskilled jobs, six months for semi-skilled jobs or eight months for skilled jobs." The purpose of the limitations was to " . . . insure that companies and unions with automatic progression plans are not given a more or less favorable deal under wage policy than are companies and unions having single rates or merit increase plans within rate ranges."

[39] Maxson Corporation (#111-3253-D), July 11, 1945.

[40] The Board majority said:

" . . . The middle of the range is a rate which a normally competent employee is entitled to after a reasonable period on the job . . . a practice which has not been challenged by either Management or Labor during all of the extended discussion of the subject before and within the Board."

[41] I.e., based on quality and quantity of output rather than such subjective factors as "personality," "attitude," "loyalty," etc.

to the indirect effects on internal wages of the program designed primarily to effect general wage level stabilization.

An integral part of the Board's stabilization policy was the correction of "substandard" wages.[42] The Board permitted employers to raise wages up to 50 cents an hour voluntarily, without Board approval.[43] In voluntary or dispute cases, the National Board granted increases up to 55 cents an hour and permitted its regional boards to do likewise.[44] The substandard policy was based on the principle that rates below these levels were "insufficient" to maintain a decent standard of living and as such were inequities which the Board was authorized to correct.[45]

Serious intraplant problems were often created by the application of the substandard policy. Raising workers below the substandard minimum disturbed the differentials with higher paid workers. After such an increase in a given case, the Board was usually requested to grant a similar increase to workers above the substandard rate on the grounds that the original plant differentials had been disturbed and an intraplant inequity created. The request to restore the differentials was often made despite the fact that the original wage structure itself may have been inequitable.

Under the broad authority of Executive Order 9250, the Board was generous in granting some kind of an adjustment for the higher paid workers after those below the substandard level had received substantial increases. In many instances, the adjustment was something less than for the substandard employees on the premise that the substandard rates were out of balance to begin with and raising them merely alleviated the inequity.

[42] The term "substandard" was never defined. It was used in the President's message of April 27, 1942, and again in Executive Order No. 9250, Oct. 3, 1942. The War Labor Board's *Manual of Operations*, Aug. 1, 1943, Section 1100-1999, "Basic Statistics and Regulations" states, " . . . the Board is not in a position at this time to enunciate a General Order to govern the adjustment of wages and eliminate substandards of living. The Board will not undertake to measure substandards of living by any fixed wage rates. . . . Such cases involving substandards of living as may arise will be considered by the Board on their individual merits until sufficient experience has accumulated to permit the statement of a more general policy. . . ."

[43] General Order 30, adopted Feb. 4, 1943, amended Aug. 23, 1943, provided for a substandard rate of 40¢ an hour. This was raised to 50¢ an hour in an amendment Nov. 11, 1944.

[44] Instructions to regional boards, March 11, 1943, provided for 50¢. This minimum was raised to 55¢ in instructions of Feb. 26, 1945. In General Order 30, as adopted Feb. 14, 1943, wage increases could be made "provided that such increases shall not furnish a basis . . . to increase prices. . . ." In the amendment of Nov. 11, 1944, increases above 40¢ could not be made without Board approval if they would serve as a basis " . . . to increase prices." It should be noted that the substandard policy did not apply "automatically to every case involving rates below such a minimum." Voluntary applications could be approved up to the substandard rate, but in dispute cases increases after May 12, 1943, were to be based on the prevailing market minimum. (See Indiana Associated Telephone Corporation, 2522-CS-D, and press release B-1411, April 2, 1944.)

[45] Chairman William H. Davis, public statement April 2, 1944. (See press release B-1411.)

The problem of maintaining intraplant differentials under a liberal substandard policy became more difficult after Executive Order 9328 of April 8, 1943. That order directed the Board, "... to authorize no further increase in wages or salaries except such as are clearly necessary to correct substandards of living. . ." Workers under the substandard minimum could be granted increases, but workers above could not. If plant-wide dissatisfaction would result from an increase to the lower paid workers in a given plant, the Board was confronted with a dilemma. It had authority to correct substandard wages but it couldn't use the authority effectively because of adverse effects on intraplant relationships. To meet this problem the May 12, 1943, Directive of the director of Economic Stabilization said, in part:

> ... in connection with the approval of wage adjustments necessary to eliminate substandards of living ... the Board may approve wage and salary adjustments for workers in immediately inter-related job classifications to the extent required to keep the minimum differentials between immediately inter-related job classifications necessary for the maintenance of production efficiency.

This clarification of E. O. 9328, in effect, gave the Board authority to grant increases up to the substandard minimum and to taper the increases of the immediately interrelated jobs above the minimum.[46] The tapering process was given further substance in an amended regulation of August 28, 1943.[47]

The tapering of rates above substandard level had varying results. In plants whose key occupational rates were generally below or clustered around the substandard level, the new policy worked fairly well.[48] The Board found it possible to make adjustments, not only in individual plants but industry wide as in the case of the laundry, work glove, and cotton textile industries. But in plants with widely scattered rates the results were not satisfactory and severe criticism arose from both labor and management over the intraplant differentials created by Board action.

The Board recognized the difficulties of attempting the highly technical task of determining new intraplant differentials. It recognized that "the adjustment of rates within a group of related jobs is a delicate matter requiring intimate familiarity with the conditions ... in the plant" and could be done more satis-

[46] For cases before the National Board, this meant up to 50¢ between March 11, 1944, and Feb. 26, 1945, and 55¢ thereafter. Regional boards set various rates for given localities ranging from 40 to 50¢ between March 11, 1944, and Feb. 26, 1945, and from 40 to 55¢ thereafter.

[47] The Aug. 28, 1943, regulation was designed to tighten up the tapering procedure. Referring to adjustments above the substandard minimum, the regulation said: "Such adjustments are to be tapered off rigorously in application to higher job classifications so as to apply only in those classifications and only to the extent necessary for productive efficiency in the interrelated job classifications." Occasionally, the Board did grant broader increases even after May 12, 1943. See, for example, Telegraph Cable Company (#2671-D), May 31, 1943.

[48] Cf. Everbest Engineering Company (#551), a case in which uniform "across the board" increase was granted for a plant with a majority of workers below the substandard rate.

factorily in organized plants by collective bargaining between the parties. Consequently, increases permitted under the substandard policy were frequently given in a lump sum to be distributed among the jobs under the tapering principle so as to correct not only the substandards but "existing inequities."

A special type of tapering was applied in the cotton garment industry, in order to avoid creating intraplant inequities.[49] A Board panel found that 41 per cent of the employees involved were receiving incentive earnings of less than the proposed 50 cent minimum rate. The resulting increase if applied to each worker would distort internal structures and require a burdensome payroll calculation each week. The Board therefore approved a plan which tapered above the 50 cent minimum by plant instead of by individual worker. Each plant-wide increase was based on average straight time earnings of workers in the key occupation of sewing machine operator.

An unusual and significant step in eliminating substandards and at the same time correcting irrational intraplant rate structures was taken by the Board in the New England and southern textile cases.[50] An analysis of 54 representative companies revealed substandard wage levels and rate structures severely compressed around plant averages. The spread between the lowest and highest rated jobs in southern mills averaged only 27.5 cents and in the northern mills, 47 cents. The spread was as narrow as 5 cents in some establishments.[51] The minimum spread should have been at least 35 cents if skilled workers were to be adequately compensated, according to the Board's majority opinion.[52] Both the substandard levels and the distorted structures were cited as important factors in the severe wartime loss of manpower by the industry. Workers who remained had little incentive to acquire skills.

The Board attempted to meet both the problems of low levels and inequitable internal relationships by establishing "peg points," which ranged from 55 and 57 cents for common labor in the southern and northern plants respectively, to 90 cents and $1.20 for the highest skilled job of loom fixers.[53]

Management and labor were directed to interpolate the rates for interrelated classifications in such a way as to develop balanced structures. The decision affected some plants only slightly but for others meant drastic overhauling of internal rates. Because a pattern was set for future collective bargaining, the Board's decision was felt throughout the textile industry even though only a

[49] Special tapering procedures were also used in the laundry, lumber, and canning industries.

[50] Twenty-three Southern Cotton Textile Companies; 25 New England Cotton and Rayon Companies; 6 New York and Pennsylvania Rayon Companies (#111-5110, et al.) March 9, 1945.

[51] In one plant the minimum rate was 50¢ and the plant average only 53¢ per hour.

[52] One of the few job evaluation plans in the industry indicated that a 47¢ differential between bottom and top of the rate structure was reasonable on the basis of differences in relative job content.

[53] "Peg points" or guides were set for the unskilled classification of common labor, 5 semiskilled machine tending jobs, and the highest skilled job of loom fixer, in both the northern and southern areas.

small percentage of textile firms were immediately subject to the Board's directive.

Under the general substandard policy, the lowest paid workers moved up more rapidly than the highest paid, resulting in differentials relatively more favorable to the unskilled. On the other hand, the substandard policy had the effect of removing some of the inequities carried over from depression years when the less skilled suffered greater wage decreases than the more highly skilled. On occasion, interunion tensions became high because the lower paid unskilled and semiskilled production workers organized on an industrial union basis obtained greater increases than the highly skilled maintenance workers organized on a craft basis.

Many of the intraplant problems faced by the Board in its substandard policy were also present in the application of the Board's Little Steel Formula, to correct for "maladjustment", i.e., the rise in the cost of living. The formula held that all workers were entitled to an increase of 15 per cent above their average hourly earnings in the payroll period nearest January 15, 1941. Although the maladjustment policy originated in an industry-wide decision, it was generally applied on a company basis.

The principal question in granting Little Steel increases was: To what unit within the company shall it apply? By and large, the Board attempted, "unless compelling circumstances dictated otherwise," to apply maladjustment correction to the collective bargaining unit. Seldom were all workers covered by a single bargaining unit. In the simplest type of case "production" or "plant" workers were in one unit and the white collar office workers in another, the latter usually unorganized. An increase to one disturbed normal differentials and created an inequity for the other. The Board normally considered each "payroll unit" separately in granting the 15 per cent correction.

In some plants there were three or more bargaining or "payroll" units with the result that the Board had to resort to widely varying methods of applying the Little Steel Formula. The Board tried to avoid granting maladjustment increases to such a small unit as a department or a single craft. Obviously, such increases, if granted, would not only disturb traditional differentials but would give the higher paid employees the largest increases and widen the differentials with the lower paid workers. The problem may be illustrated in the case of the Cincinnati Hotel Association (#3343-CS-A), June 21, 1943. Fourteen unions represented 14 hotel departments. There were separate unions for such groups as bakers, waiters, laundry workers, housekeepers, etc. The Board, in its decision, said:

> ...applying the Little Steel Formula to the individual job classifications in hotel employment resulted in negligible increases for those classifications in the very low paid brackets, but on the other hand it resulted in substantial increases for those employees in the higher paid brackets. However, it is not the policy of the War Labor Board to apply the Little Steel Formula in a manner which will produce such results. Rather, it has been the policy of the Board, as a general rule, to apply the 15 per cent cost of living formula to all of the workers in a given plant, without reference to job classifications.

Another case which pointed up the same principle was the Eleven Fourdrinier Wire Weaving Companies (Case 111-2842-D), February 14, 1944. The weavers were highly paid and had bargained separately for many years. The remaining employees were paid on a much lower level of rates. The Little Steel Formula applied only to the weavers would yield an increase of 23 cents an hour and to the nonweavers would yield something less than 10 cents an hour. If the formula were applied to all the employees, the increase would be around 16 cents an hour. The Board granted 10 cents an hour to all workers. This type of decision "took from above and gave below." In a sense, this was using the maladjustment formula not only to correct for the increase in cost of living, but also to reduce any alleged intraplant inequity in the form of excessively low rates of the least skilled workers.

It will be noted that the application of Little Steel "across the board" gave a higher percentage to the lower paid than to the higher, which created dissatisfaction among the latter. At the same time it retained the existing cents per hour differentials between occupations.

The Directive Order of the director of Economic Stabilization, May 12, 1943, requires further consideration because of its effect on intraplant wage adjustments. Regional boards were directed to set up occupational wage rate minima and maxima or "brackets." The minima were to be based on the first substantial cluster of "sound and tested" occupational rates in a given labor market. Companies could come up to the minimum "bracket" or "stabilized" level but no further, except in "rare and unusual" cases.[54] In order to facilitate the handling of hundreds of cases, regional boards established industry yardsticks composed of related occupational wage rate minima. In a sense, these yardsticks were labor market wage rate schedules as contrasted to company rate schedules.

The differentials between occupations of WLB "stabilized" yardsticks were necessarily based on area averages. The internal wage structure of each applicant in a given industry was measured with that industry's area yardstick.

Immediately the question arose, Should a company be granted a cents per hour increase in each occupation up to the minimum rates set up by the Board? If this were done, drastic changes might result in the company's internal structure. Or should the company be given a cents per hour increase for each occupation based on an average amount due after comparing each occupation to the "stabilized" yardstick rates? The latter would preserve the cents per hour differential previously existing in the company wage structure but would yield greater increases.

In the first few months under the directive varying increases in individual occupations were granted by some boards. The result was severe distortions in internal wage structures. For example, in one printing company case a regional board granted an increase to compositors on the basis of area brackets but denied

[54] For a discussion of the Board's policy of general increases prior to the April 5th directive order of the director of Economic Stabilization, see Harry Henig and S. Herbert Unterberger, "Wage Control in Wartime and Transition," *American Economic Review*, June 1945, pp. 319–336.

an increase to the pressmen on the same basis.[55] The two occupations had traditionally been paid the same wage in the plant. Yet it was area practice to pay a differential. What should be the deciding factor—the company's traditional intraplant relationship or area intraplant practice? The National Board ruled in favor of the former in order to "avoid the creation of intraplant inequity."

The needs of internal alignment thus clashed with a policy intended to limit upward movement in the level of wages. Regional boards soon came to a policy of granting a specified cents per hour increase to all occupations involved, based on a plant-wide averaging of the amounts due under the bracket policy. Internal alignments could be preserved even though individual rates might be approved above the bracket minimum. Occasionally the tapering principle was applied to the higher classifications but only with great difficulty.

III

Labor market conditions of World War II catapulted internal wage problems from a secondary concern to a position of foremost importance to management, labor, and government. The adjustment of intraplant relationships became almost as important as, and often in conflict with, the control of interplant wage levels under the stabilization program of the National War Labor Board.

By placing the burden of proof on applicants requesting approval of adjustments, the War Labor Board forced a review of internal wage structures on an unprecedented scale and revealed the extent to which American industry had failed properly to develop logical and rational wage structures and adequate wage administration programs.

The Board exacted something in the way of internal wage rate rationalization in return for a fairly liberal stabilization policy, especially during the first eight months of operation under Executive Order 9250. Board policy combined with wartime market conditions to bring about greater standardization of jobs and job rates, greater use of job evaluation and time study, a reduction in excessive numbers of jobs and labor grades, elimination of inequitable differentials, and more systematic provisions for individual advancement. By constantly reminding labor and management of the necessity for relating job rates to job content, the Board made a positive contribution to industrial relations.

The Board's substandard policy narrowed differentials between the lowest and highest paid workers, a result which was not too unfavorable in companies with rates clustered around the substandard level, but decidedly unfavorable in companies with rates scattered far above and below the substandard level.[56]

The Little Steel Formula tended to preserve internal differentials, but usually gave less per cent-wise to the higher paid workers than to the lower paid. The principle of "taking from above and giving below" was followed in other types of

[55] Acme Manifolding Company, Inc. (2-4729).

[56] WLB policies, insofar as they raised the lowest paid workers more rapidly than the highest, were probably in line with the general effects of advancing technology on plant wage structures in many industries. Though the evidence is not conclusive, it appears that wage structures over the years have been "pulling in" toward the average.

adjustments and posed neat questions of "social equity" versus scientific job alignment.

The most serious difficulties in intraplant adjustments arose under WLB's "bracket" policy after May 12, 1943, when market area occupational levels were used as the yardstick for determining the amounts of specific internal rate adjustments for individual companies. The conflict of rationalization versus stabilization probably was not resolvable, but the experience indicated internal alignments should be given preference over labor market area alignment.

The years 1942–45 accelerated the centralization of internal wage controls with less and less authority and discretion delegated down the line. The period fortified organized labor's position in determining intraplant job rate relationships as well as general plant-wide adjustments.

MOBILITY AS A FIELD OF ECONOMIC RESEARCH

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The history of all industrial nations has had several things in common. One of the more important common characteristics has been the declining significance of agriculture in the national economy. In the United States the rapid advances in agricultural technology, the high birth rates in farm areas, and the slow growth of demand have necessitated a large transfer of labor from agricultural to urban employment.

The magnitude of the farm-to-urban migration, and the large reverse movement, may well surprise many. Between 1920 and 1946 some 45 million people moved from farms to nonfarm areas. About 28 million did exactly the opposite—returned from cities and villages to the farms. Yet the net movement of 17 millons must be considered to have been large. Large as the net of farm movement was, not until World War II was any substantial reduction achieved in farm population.[1]

Consequently at the beginning of World War II there were in agriculture far more people than could earn satisfactory incomes. This was true of even the best agricultural areas. Even after the large reduction in farm population during the war, at least half—perhaps more—of American agriculture is still subject to serious excess supplies of labor.

The excess supply of labor in agriculture is significant from two points of view. One is the effect which the excess employment in agriculture has upon the total national product or income, or, put another way, the efficiency with which the nation's resources, particularly labor, are used. A second point of reference is the impact of a too large supply of labor upon the level of per capita farm incomes.

Not all of the inefficiency existing in agriculture, nor all of the low incomes, are due to a larger population in agriculture than can obtain a level of earnings equivalent to that received by labor of comparable skills elsewhere. Yet so many of the forces leading to inefficiency and low incomes are related to excess supply of labor that one must accept the overwhelming importance of migration and mobility in seeking a solution to the resource and income problems in agriculture.

The social and political significance of the problems related to migration and mobility are alone sufficient to warrant extensive research investigations. But research in mobility is important from another standpoint. Mobility, as an empirical aspect of human behavior, has had the interest of social scientists in several different disciplines. Consequently, for this reason and because of the nature of the problem, mobility and migration offer considerable opportunities

[1] In 1920 farm population was 31.6 millions; in 1940, 30.3 millions, and in 1946, 26.8 millions. For data on farm population and migration, see *Farm Population Estimates, United States and Major Geographic Divisions, 1910–46*, issued by the Bureau of Agricultural Economics, June 1946.

for joint and cooperative research by individuals specializing in the study of different aspects of social behavior. For the most part, the following approach bears the imprint of the training of the writer as an economist.

I

Viewed pragmatically, analysis of the nature, extent, results, and motivating factors of private migration as it has occurred in the past is important for two reasons: (1) Why has private and unguided migration failed to equate labor returns in agriculture and the rest of the economy? (2) What conditions are conducive to achieving the optimum rate of migration and mobility? These two points are important because of their implications to the formulation and promulgation of agricultural policy. In addition, systematic analysis of migration and mobility can add significantly to our body of knowledge and generalizations concerning social behavior. In a dynamic and changing world, there is probably no adjustment of greater significance than is involved in migration.

Our insight into the basic characteristics of migration has been extended only modestly since Ravenstein's epic study, "The Laws of Migration," published in 1885.[2] From an analysis of English census data, Ravenstein set forth seven "laws of migration." He found that migrants move only short distances and that females are more migratory than males. He showed that migration proceeds through a process of absorption—individuals near an attracting center move to that center, others move into the area left, and so on. Migration thus occurs in stages, though specific individuals may make only one move. Ravenstein also found that each main current of migration is accompanied by a countercurrent.[3]

Additional empirical generalizations have been developed with reference to American experience. The more important may be briefly noted. Youth and young adults are more migratory than older people. Small family units are more likely to migrate than large. Males move longer distances than females. Regional or area differentials in the net rate of rural-urban migration seem to be related to the economic status of the areas in a manner fulfilling analytical expectations. In addition, regional or area differentials are affected by the proximity of the area to large cities—the attracting centers.

Perhaps the most significant of the generalizations explaining migration has been that net off-farm migration is closely related to the availability of job opportunities in nonfarm sectors of the economy. People leave farming communities when unemployment is of modest proportions; when unemployment is high the migration is small.[4]

It should, however, be possible to go beyond empirical generalizations of this sort, important as they are, to a theoretical schema that will be capable of explain-

[2] E. G. Ravenstein, "The Laws of Migration," *Journal of the Royal Statistical Society*, June 1885.

[3] Three articles on labor mobility in England by H. Makower, J. Marschak, and H. W. Robinson represent the most definitive work on migration from an economic viewpoint. These articles are published in *Oxford Economic Papers*, No. 1 (Oct. 1938), pp. 83–123; No. 2 (May 1939), pp. 70–97, and No. 4 (Sept. 1940), pp. 39–62.

[4] Cf. T. W. Schultz, *Agriculture in an Unstable Economy*, chap. IV.

ing the important aspects of behavior involved in migration and mobility. Such a theoretical formulation should include, first of all, a reasonable explanation of the important motivating factors. Though there undoubtedly are a number of more or less personal factors—such as illness, physical disability, desire to be near family members, and poor relations between landlord and tenant, for example—it seems reasonable to presume that the most significant motive underlying rural migration is the desire for improved economic conditions.

The theoretical formulation should also provide a set of generalizations regarding the conditions conducive to (or retarding) migration sufficiently powerful to explain the great variations in the extent that migration has reduced the degree of excess labor supply. Emphasis would undoubtedly be placed upon the effects of urbanization, level of education, racial and ethnic differences, past incomes, savings, and the cost of movement.

Broadly speaking, it may be said that over the past 30 years private migration has failed to eliminate the excess of labor in agriculture. Migration has been inadequate to equalize economic opportunity, either within agriculture or between agriculture and the rest of the economy. Yet the disparities in opportunity would have been greater at any particular time if less migration had occurred.

II

The effects of mobility and migration, either in response to positive policy or in the absence of any policy, can be evaluated only in terms of certain goals or objectives. There are two broad goals toward which a mobility policy should be oriented. The two goals are: (1) Labor in agriculture should receive real economic returns equivalent to the returns in other sectors of the economy for work of comparable skill, training, and difficulty. (2) Farm families should receive sufficient income to provide a socially accepted minimum scale of living.

The mere enunciation of the two goals does not make them relevant guides for the evaluation of the results of migration and mobility. From the economic point of view it can be argued that the two goals are important and significant. But it should be possible to go beyond the theoretical formulation of economics to determine suitable objectives. Research undertakings should emphasize the possibilities and necessities of applying systematic methods of study of acceptable social goals. The materials which must be scrutinized are probably different from those usually studied by most of us. It seems evident, however, that a study of past and current legislation, the statements and positions of various interest groups, the attitudes of the press and political parties, and the objectives and purposes of social action dealing with related problems can indicate what goals and objectives are likely to be acceptable.

The two goals noted above have rather distinct implications. The first—equivalence of real economic returns—is a necessary condition for efficient utilization of resources. However, this goal accepts the resources as they are—with their given level of productivity. The second goal implies that steps will be taken to insure a minimum level of investment in every individual. Poverty

breeds poverty by restricting the development of productivity—skills, attitudes, mental capabilities—in youth. Labor productivity is produced in the same sense as any other type of productivity. If the second goal is achieved, all individuals will be assured of a certain level of investment and, given their innate capacities, a certain level of productivity to serve as a basis for earning power.

However, research must go beyond the statement of goals in so general a context. The goals must be given an empirical formulation to permit their application to concrete situations. The empirical formulation of the concepts is required for later aspects of research on migration and mobility as well as for testing the effectiveness of actual policies.

Two general problems must be solved in applying the first goal. One is the determination of labor returns in agriculture. Because the farmer supplies most of the labor, capital, and land, the determination of labor returns is a difficult task. The other is the evaluation in real terms of the monetary incomes in agriculture and in other segments of agriculture. It may, of course, be necessary to broaden the concept of equivalent real income to take into account other attributes of work and life in agricultural and urban areas. Such considerations as the quality of public services, uncertainty, difficulty of work, and similar phenomena may have to be given weight.

The goal of a minimum scale of living presents the same problems of comparison as are presented in calculating equivalent returns. In addition there is the problem of determining the actual content of an accepted minimum. Though there does not seem to be any "scientific" solution to the question, various specialists—nutritionists, educators, social service workers, economists—can make clear to policy making groups the implications and effects of various minimum levels. Furthermore, while there may be considerable disagreement about some parts of the budget, other elements such as education, health service, and perhaps food may be subjects of considerable unanimity.

III

An adequate analysis of the required movement of labor out of agriculture if the goals are to be met should consider regions or areas of considerable homogeneity. However, as an indication of the magnitude of the required change of employment, some crude estimates are made for the nation as a whole. It should be noted that the method used is inferior to others that might be employed.[5]

Stated simply, the achievements of the migration goals in the short run require that labor must leave agriculture until the real returns in agriculture are the same as for comparable labor elsewhere. In estimating the amount of migration and change of occupation required to bring about an equivalence of

[5] A more refined technique would involve the derivation of production functions, the demand and supply functions for agricultural products, the demand and supply functions for labor and other resources, and certain general functions determining the level of economic activity. Cf. Trygve Haavelmo, "Quantitative Research in Agricultural Economics: The Interdependence Between Agriculture and the National Economy," *Journal of Farm Economics*, XXIX (1947), pp. 910–24.

returns, certain empirical formulations are required. One is the determination of differences in the purchasing power of income in different occupations and places of residence. This problem is not considered in detail here. On the basis of extremely crude manipulations, it may be said that the purchasing power of income on farms is (roughly) a fourth to a third greater than the income received by factory workers in small and large cities.[6]

Another problem of an empirical nature is the determination and segregation of the various components of agricultural income.[7] A third is the consideration of the effect of a change in the agricultural labor force on the output of agricultural products and thus gross farm income. The degree of inefficiency in agriculture and the failure to use capital in appropriate amounts leads the writer to the conclusion that, after a short period of adjustment, employment in agriculture could fall by at least a quarter—perhaps a third—before output declined. In fact, given one to two decades for readjustment, output might be larger with a smaller than with a larger labor force.[8]

If it is remembered that the purchasing power of income on farms is perhaps a third larger than income received by factory workers, the following income comparisons are of significance (on a per worker basis):

	1939	*1944*	*1946*
1. Net agricultural income	$510	$1,560	$1,885
2. Net total farm income[9]	670	1,960	2,310
3. Labor income from agriculture[10]	380	985	1,270
4. Annual income of hired farm workers[11]	380	1,005	1,181
5. Labor income—commercial farms[12]	540	1,375	1,795
6. Labor income—all farm workers—all sources	540	1,335	1,695
7. Income of employed factory workers	1,200	2,325	2,240

[6] Nathan Koffsky of the Bureau of Agricultural Economics had made certain preliminary studies in this field. He had compared the cost of living in farm and urban areas by pricing a farm budget at farm and urban prices and a budget of a city family at farm and urban prices. His results, which have not been published, were presented at the 1946 Income Conference of the National Bureau of Economic Research held in New York in November 1946.

Koffsky found that the farm budget cost 30 per cent more when valued at urban prices than when valued at prices paid by farm people. The urban budget cost 14 per cent more in the urban area. However, it may be argued that these cost of living differences are too small. Koffsky assumes that housing costs are the same in urban and farm areas. Assuming that comparable housing costs 30 per cent more in urban areas than on farms, Koffsky's cost of living differentials would be about 35 and 22 per cent.

[7] This step is necessary to evaluate the income earned by comparable labor in the available nonagricultural occupations.

[8] A fourth factor which warrants investigation is the effect of a large off-farm migration upon absolute and relative wages in those occupations best suited for the migrants. For Negroes and other individuals having very modest skills, the extent of migration might be sufficiently important to result in significant reductions in relative incomes for many off-farm migrants.

[9] Includes income to farm people from off-farm labor and capital employed outside of agriculture owned by people living on farms.

[10] Labor income of all farm workers, including farm operators, unpaid family labor, and

It is obvious that in 1939 farm incomes, regardless of how calculated, were considerably below the incomes of factory workers. The highest of the figures—net total farm income—is only $670 or considerably less than the income of factory workers. The most comparable estimate of farm labor income is that of labor income on commercial farms (roughly the largest 50 per cent) of $540. This is at least a third lower than the factory worker income, after adjustments are made for differences in living costs.

By 1944 there was a considerable improvement in the relative status of agricultural workers. The real labor income of workers on commercial farms was probably only slightly below that of factory workers. If an adjustment were made for nonfarm labor income, income equivalence might have been achieved. However, the workers on 3,000,000 farms received considerably less than the $1,660 received by workers on commercial farms. This is indicated by the average labor income on all farms of $940. Though there is undoubtedly some overestimate of the actual labor performed on the smaller half of the farms, the data indicate extremely low income.

How many people must leave agriculture to equalize income earning opportunities? In part the answer depends upon how well the economy as a whole is operating. The higher the level of employment and incomes the greater the number of people that could remain in agriculture.[13] In 1940 there were approximately 10,600,000 man-years of work performed in agriculture. Our estimates indicate that 2.5 to 3.5 million fewer workers than were employed in 1940 would permit attaining the goal of equivalent incomes.

If 1939 cost, price, income, and employment conditions represented long-run expectations there might well be 4,000,000 farm units employing 7,000,000 farm workers and providing a place of residence for 20,000,000 farm people. This estimate, crude as it is, was arrived at in the following manner: (a) There were about 950,000 farms that provided labor returns equivalent to the earnings of factory workers. These farms provided employment for 2,750,000 workers. (b) There were about 1,250,000 farms that may be classified as nominal farms. They are so designated because the total value of product was less than $750 and no power source was owned by the operator. These farms include largely part-time, residence, retirement and gentlemen's farms. It is assumed that no change

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wage labor. For method of making estimate see forthcoming article by writer, "Allocation of Agricultural Income," which is to appear in the *Journal of Farm Economics*.

[11] The estimate of the annual income of hired farm workers is derived by dividing the total farm wage bill by the number of hired farm workers. For estimates of the wage bill, see "Net Farm Income and Parity Report: 1943," issued by the Bureau of Agricultural Economics, and *The Farm Income Situation*, June–July 1947.

[12] Commercial farms include all farms that had a total value of products sold, traded, or used in excess of $600 in 1939.

[13] Throughout in these estimates the assumption is made that farm migrants suffer the same amount of unemployment that prevails in the economy as a whole. Studies of census data for 1939 seem to substantiate the assumption that recent migrants to an area are as likely to be employed as natives.

should be made in the number or size of these farms as most of the operators do not depend upon farming for their livelihood. These farms provided employment for 1,300,000 workers.[14] (c) There were an additional 125,000 farms reporting little or no labor. Presumably these farms represent land left fallow or idle, farms operated on a share arrangement, or part-time and residence. (d) The remaining 3,825,000 farms provided employment for 6,650,000 workers. These farms must be considered to be of inadequate size. The largest percentage of the farms provided a labor income per worker of less than $500 in 1939. (e) On the basis of land and buildings required per worker to obtain an adequate labor income in 1939, the 3,825,000 farms should be replaced by no more than 1,500,000 farms with 3,000,000 to 3,500,000 workers.[15]

If 1941 cost, price, employment, and income relationships represented long-run expectations there would be more—but not many more—job opportunities in agriculture than under 1939 conditions. While labor income on commercial farms increased from $540 to $790, factory workers' income increased from $1205 to $1495. The absolute increase in industrial workers' income was the greater, but farm workers gained relatively. Another factor in improving the position of nonfarm workers was the reduction of unemployment from 16 to 6 per cent. As a result, the increased urban opportunities almost offset the gains made by agriculture. At most, it would seem that farm employment might be about 250,000 higher than under 1939 conditions.

If 1944 cost, price, income, and employment conditions represented long-run expectations, one might anticipate that a total farm labor force of 8,000,000 might be adequately employed. Most of the movement out of agriculture would occur in the South. The total farm population might be slightly more than 23,000,000 compared to more than 30,000,000 in 1940 and 27,000,000 in 1946.

When the migration and mobility goal is achieved, there will remain a continuing need for a relatively large net out-migration from agriculture. An annual movement of 250,000 to 300,000 people including about 80,000 to 100,000 adult workers will be required merely to offset the excess of births over deaths. This off-farm movement should be compared with actual experience in recent years if one is to understand its importance.[16]

In addition, if the past is an adequate guide for the future, more workers will be displaced by technological advance. How important this will be depends largely upon the rate of growth of national income and the rate of technological advance in agriculture. It would not seem unreasonable, however, to assume that the annual rate might be as high as 50,000 workers (150,000 people) for at least two decades. If this were true, the net off-farm migration might have to be

[14] Ronald W. Jones of the Bureau of Agricultural Economics has stated that the census data for 1939 indicate that many, if not most, of these farms do not have any outside source of income and are operated by men less than 65 years old. This information would indicate that the estimates of required migration are too small.

[15] The basic assumption used in estimating the required net migration was that income per worker increases in a consistent fashion when the amount of capital and land per worker is increased. Cf. D. Gale Johnson, *Forward Prices for Agriculture*, pp. 91–108.

[16] In 1938 net off-farm migration was 420,000; in 1939 it was 491,000.

in the neighborhood of 400,000 or more per year to maintain an equilibrium position once it had been reached.

IV

Mobility of the human agent out of agriculture can take two principal forms: (1) a change of residence to an urban area and (2) a change of occupation involving part-time or full-time nonfarm employment by one or more members of the family, who retain residence on the farm. Most of the mobility that has occurred in the past has been of the first type—actual migration. There are many interested individuals who would like to encourage the second. For the present, however, we shall be concerned only with actual migration of people out of agriculture.

The impact of migration and rural depopulation on the social and economic structure of rural communities represents an interesting area of analysis and research. By and large, relatively little is known of these effects. The nature of the problem can perhaps be best posed by raising the extreme question: When does the population density of an area become so limited that on both social and economic grounds the area should be completely depopulated? It may well be that a minimum density is required to support the functioning of basic institutions and services, such as schools, churches, roads, medical care, markets, and police protection.

In the less extreme cases, some attention should be devoted to the ways and means rural communities may utilize to adapt themselves to a reduced population. Many ways of doing things become obsolete. Changes are required. An important consideration is the effect on the cost of schools, public services such as roads, public utilities, and churches. In most instances rural depopulation is likely to be cost increasing.

Yet such a conclusion is not a valid argument against migration. In fact, one might anticipate that the effect of reduced population density, up to a certain point, would increase incomes much more rapidly than the aforementioned cost. Consequently the ability to pay the increased costs of services may increase more rapidly than the costs. Past experience has certainly indicated that within wide ranges the density of farm population is inversely related to the quality of rural education and other services.

Equally as important as the increased cost of services is the necessary readjustment of the modes of operation of such institutions as the church, school, and local government.

The reduction of farm population density will have significant repercussions upon the local trading centers and commercial institutions serving the area. Migration of farm people will probably be accompanied by a reduction in village and town population—or the so-called rural nonfarm population. Not only will fewer people be required in villages and towns, but the nature and character of services will change as rural population declines.

V

Though the most important end of a mobility policy is that of achieving equivalent returns for comparable resources, two important conditions should be

accepted as guides in the selection of means and the operation of the policy. One condition is that the mobility policy should try to minimize the social disorganization of the rural community as it is depopulated. The other is that the mobility policy should aid in creating the most favorable economic development of the resources of the areas involved.

At the present there seems to be little to say concerning the necessary measures to minimize social disorganization. This is an area requiring analysis and research. In this case the trite thing may be the correct one, namely, that education which creates an awareness of the basic problem confronting the poorer agricultural areas and shows the necessity of migration may do much to permit the community to plan for and adjust to the new situation.

Nor does there seem to be much that can be said, given our present knowledge, about measures required to develop the total resources of a rural community, area, or region. The desirability of increased investment and industrialization in the overpopulated areas seems evident, if the long-run expectation is that such investments will prove profitable. If subsidies are necessary to encourage original investment, such subsidies should not be ruled out.

The desirability of developing new opportunities for employment near the excess labor supply lies in the relationship between distance and the rate of migration. If the cost of movement, the degree of the break in family or community ties, and the relative change in environment can be minimized, migration will occur more rapidly and probably result in fewer disappointments and less personal and social disorganization.

What major features should a mobility policy have? One cannot be sure at present, yet there are a few evident things that would need to be done:

1. The productivity of many persons on farms must be improved through more and better education, improved nutrition, increased medical and dental facilities, and superior sanitation.

2. The education afforded rural people must be such as to permit individuals more readily to adapt themselves to an urban environment. This probably means less rather than more vocational education. Emphasis should be placed upon an understanding of economic, social, and political processes.

3. A system of grants and loans must be established to aid people who wish to migrate. If you are poor enough, you may not have the funds necessary to pay transportation costs or the necessary reserve to withstand the risk of unemployment.

4. A labor outlook program must be provided to give migrants a more adequate basis for choosing a particular destination and type of employment and a federal employment service that can obtain jobs in advance of migrating.

5. The maintenance of a high level of employment is not only a desirable goal in itself, but is a basic precondition for the successful operation of a mobility policy.

Given our existing political framework and general moral and social values, migration will have to be undertaken by the individual involved on a voluntary basis. The final decisions will be made by those who migrate. The function of a mobility policy must be largely to create incentives that make movement de-

sirable, to provide financial assistance under certain conditions, to give individuals the necessary data for making a rational choice, and, where possible, actually to obtain jobs for individuals before movement occurs.

VI

Our analysis of mobility and migration of the human resource in agriculture has considered at least five significant aspects. These may be described briefly as follows:

1. The extent, nature, motivating factors, and results of personally undertaken migration of people out of, within, and into agriculture. The emphasis should be upon the development of generalizations that explain the behavior involved in mobility and migration and the analysis of the effects and consequences of migration.
2. The socially accepted goals of a mobility policy. These goals should not be separated from the consideration of the general goals of the desired social-economic-political organization of our entire society.
3. The necessary amount and direction of migration and mobility required to achieve the migration goals. Consideration should be given to state or regional situations and the possibilities of migration from one agricultural area to another.
4. The effects of rural depopulation on the general social, economic, and political structure and institutions of rural communities.
5. A mobility policy that will facilitate the movement of people out of agriculture, minimize the social disorganization of rural communities, and make possible the most favorable economic development of the resources involved.

In this paper no attempt has been made to treat any one of these significant facets of migration in a definitive fashion. The purpose has been to indicate some of the significant issues that must be considered in research undertakings dealing with mobility and migration. Consideration of each of these aspects will give a broader focus to research than has generally been true of most research conducted in this field. As a result such research should serve as a more adequate base for policy formulation.

Migration and mobility is a field of study that cuts across the boundary lines of several social science disciplines. The economist is interested in migration as a means of improving resource allocation and the regional distribution of income. The sociologist is largely concerned with the impact of mobility and migration upon the community. The psychologist is likely to approach it in terms of the effect of migration upon personality development. The political scientist sees migration in terms of its effect upon the balance of power, particularly in its regional and occupational effects.

It is obvious that the nature of science makes it possible for each social scientist to concentrate upon that particular analytical element of social or individual behavior that can be conceptually isolated. But when policy formulation is at issue, social behavior as a concrete entity—and not separate analytical elements—is involved. Migration has such pervasive effects upon the whole fabric of human behavior that it is necessary to combine the insights of several social science disciplines if reasonable policy recommendations are to emerge.

SOME ASPECTS OF THE SOUTH'S FINANCIAL DEVELOPMENT, 1929–1946

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In 1938 the President said, "It is my conviction that the South presents right now the nation's number one economic problem . . . ."[1] Since the decade of the thirties the South[2] has made remarkable progress in overcoming the poverty described by the President's Committee in 1938. A leading southern banker said recently, "Things have gone well in the South these latter years. . . . All in all, there is in the Southern region a sense of economic well-being that is not matched in the record for many a year. . . . What is more, the sense of progress and of accomplishment has a certain zest-without-malice occasioned by the fact that the South, by almost any economic measure you choose, has gained relative to the nation as a whole."[3]

When a region, long suffering from economic depression, begins to recover and, as a consequence, embarks upon various programs of reform designed to promote the welfare of its people, it is imperative that it take stock of its position. It is essential that the South should know how far it has come along the road of recovery in order that southerners may decide what types and what degree of reform they are able to support. Before we are committed to new ideas it is necessary that we ascertain exactly the cause of our progress; for our improvement may be due to windfall gains that are not of an enduring sort. Much of the world's suffering during the last decade and a half was the result of a rather naïve faith that we had achieved during the twenties the best of all possible worlds and that our achievement would endure. An inventory then might have disclosed conditions that at least would have had a sobering influence.

An exhaustive analysis of southern economic conditions would, of course, take one far beyond the confines of this paper.[4] Trends in the development of the

[1] The National Emergency Council, *Report on Economic Conditions of the South*, July 25, 1938, p. 1.

There have been numerous studies of economic conditions in the South. See for example, Goodrich, et al., *Migration and Economic Opportunity*, especially chap. I; Odum, *Southern Regions of the United States*.

[2] "The South" in this paper refers to the area designated as "the South" in the report to the President by the National Emergency Council in 1938. It includes: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. "The Southeast" refers to the same area excluding Oklahoma and Texas.

[3] Malcolm Bryan, "The Supply of Funds in the South, 1946," Trust Company of Georgia, Atlanta, p. 5.

[4] In the report of the President's Committee in 1938 there was included a summary of 15 topics: economic resources, soil, water, population, private and public income, education, health, housing, labor, women and children, ownership and use of land, credit, use of natural resources, industry, and purchasing power.

financial position of a region indicate a great deal about the economic development of its people. It is, therefore, the purpose of this paper to describe the financial development of the southeastern and the southern parts of the nation during the decade and a half from 1929 to 1946, the first postwar year.

The analysis will be concerned with (a) the development of the Southeast and the South relative to the nation; (b) the internal sources and direction of the South's financial development; and (c) the conclusions that seem to follow from trends described over the last decade and a half.

The areas of our financial development that will be reviewed are: total and per capita individual income payments, including disposable income payments; major sources of income payments; tax payments; farm mortgage debt; bank deposits; insurance; and interest rates.

I

Total individual income payments in the South, 1929, amounted to $12,428 millions.[5] In 1946 the total was $31,991 millions. This represented an increase of 157.4 per cent. During the same period national individual income payments were increasing from $82,617 millions to $169,373 millions or 105 per cent. In 1929 the South received 15.04 per cent of the total individual income payments in the nation; in 1946, 18.88 per cent. Regardless of this notable improvement in the income position of the South, a sobering trend may be detected from 1945 to 1946, i.e., during the first postwar year. Despite the fact that "the South's leading industrial activities, containing a large proportion of consumer goods production, such as textile manufacture, had a relatively small problem of... reconversion, postwar,"[6] individual income payments in the South did not maintain the national rate of improvement. From 1945 to 1946 individual income payments in the South increased from $30,595 millions to $31,991 millions or 4 per cent. The national total individual income payments increased from $155,201 millions to $169,373 millions or 9 per cent.

Does the relatively greater tapering off in the growth of southern income payments indicate a measure of weakness in the southern economy? It does not necessarily mean this. Continual research should be developed to answer this question. For example, if southern income payments are tapering off on a high plateau, and because of the greater stability in the production of consumer goods (in which the South has specialized) than in durable producers' goods, there is reason to expect a stabilization of incomes at that level, then the South may soon enter another period where its income position may compare more favorably with that of the nation. If, on the other hand, the relatively greater development of southern incomes has been due, for example, to the development of durable goods[7] production that (a) may not be permanently suited to the

[5] The analysis of total and per capita income is based on data obtained from the following: for 1945 and 1946, U. S. Department of Commerce, *Survey of Current Business*, Aug. 1947; 1929, 1933, *ibid.*, Aug. 1945.

[6] Bryan, *op. cit.*, p. 3.

[7] *Cf.* Manufacturers' Record, *Blue Book of Southern Progress*, 1948, p. 28.

South or (b) may be more subject to the influences of depression than consumer goods industries, the South may be approaching the end of its period of relative progress.[8]

Given the great increase in total income payments in the Southeast and the tendency of the Southeast to suffer a net loss of population through an outward migration,[9] a greater increase in per capita income payments in the Southeast than in the nation obviously follows. In 1929 the per capita income in the Southeast was $344. This was 50.6 per cent of the national per capita income of $680. By 1938 the national per capita average had fallen to $509 and the southeastern average to $287, which was, however, 56.4 per cent of the national per capita average. In 1946 the national per capita income had increased to $1,200 and the southeastern average to $801 or 66.8 per cent of the national figure. From 1938 to 1946 the national per capita income payments had increased 135.8 per cent while the southeastern average had increased 179.1 per cent.

Despite the improvement in the Southeast relative to the nation, the southeastern region in 1946 remained the low per capita income section of the nation. Other per capita income payments by regions in 1946 were: New England, $1320; middle eastern, $1432; southwestern, $927; central, $1264; northwestern, $1162; far western, $1465.[10]

Per capita individual income payments alone do not express the level of effective income. Deductions for taxes must be made. The remainder is disposable personal income. In 1929 the per capita disposable income of the nation was $669 while it was only $341 in the Southeast. From 51 per cent of the national average in 1929, disposable per capita income in the Southeast rose to 69.3 per cent of the national average or $740 in 1946. In 1929 disposable income in the Southeast made up 10.6 per cent of the total disposable income in the nation and 14.3 per cent in 1946.

The Southeast was in a relatively better position in 1946 when its per capita

[8] Payrolls in war manufacturing industries, which include chemicals and allied products, rubber products, iron and steel and their products, ordnance and accessories, transportation equipment (except automobiles), nonferrous metals and their products, electrical machinery, machinery (except electrical), and automobiles and automobile equipment in the Southeast, declined 49% from 1944 to 1946 compared to a decline in the national average of 36%. Nonwar manufacturing payrolls increased 30% in the same period in the Southeast compared to a 26% national increase. Due to the small portion of the nation's war industries located in the Southeast, the decline in all manufacturing wages and salaries, 1944 to 1946, was 6% in the Southeast compared to 15% in the nation. But this 6% decrease in manufacturing wages and salaries in the Southeast had a significant result. Whereas, every section of the nation received as large (or larger) a part of its total income from manufacturing payrolls in 1946 as in 1940, the Southeast received a smaller part (15.7% in 1940; 15.5% in 1946). A decrease in manufacturing payrolls of 6% was able to reduce the 1946 ratio of manufacturing payrolls to total individual income payments below the prewar (1940) level in the Southeast. Nowhere else did this occur. The conclusion is obvious: Our improved income position in the Southeast came from nonmanufacturing sources. To the extent that agricultural payments are responsible, the instability of agricultural prices poses a grave threat to the improved position of the Southeast.

[9] U. S. Department of Labor, *Monthly Labor Review*, Oct. 1946.

[10] U. S. Department of Commerce, *Survey of Current Business*, Aug. 1947.

income after taxes is compared to disposable income in the nation than when its income before taxes is compared to individual income payments before taxes in other sections.[11] Federal and state taxes take a small toll from southeastern income due to the lower incomes in that section than elsewhere in the nation.[12]

II

The South with 27.5 per cent[13] of the nation's population in 1929 received 15.04 per cent of the nation's personal income payments; 13.79 per cent of total wage and salary payments in the United States; 24.51 per cent of the nation's proprietary[14] income; and 10.83 per cent of the property income[15] received in the United States. In 1946, with an estimate[16] of 27.3 per cent of the nation's population, the South received 18.88 per cent of the nation's total personal income payments; 17.22 per cent of the nation's wages and salaries; 24.05 per cent of the proprietary income payments in the country; and 15.11 per cent of the nation's property income.

The failure of southern proprietary income to increase relative to the nation's proprietary income payments was largely due to the failure of southern agricultural income to improve as rapidly as national agricultural income payments by 1946. In 1938, when the President's Committee reported, per capita agricultural cash income from marketing and government payments in the South amounted to $99.62 and in the nation to $149.09. By 1946 southern per capita agricultural income had increased 176 per cent to $274.62 while the national increase amounted to 197 per cent, and the national per capita figure stood at $442.35.[17] The increase in total agricultural cash income from marketing and government payments from 1938 to 1946 was 190 per cent in the South and 216 per cent in the nation.[18]

The Southeast, in 1946, received 10.04 per cent of the nation's manufacturing wage and salary payments compared to 7.7 per cent in 1929. This represented the greatest percentage increase of any section in the United States.

The analysis thus far has been in terms of the South's position relative to the nation. In almost every instance it shows that the South has gained. It is also important to know what has happened to the components of the total income payments within the South.

Total wage and salary payments in the South made up a greater part of wage

[11] This was true in 1929 though not to the same degree. In 1929 per capita income payments in the Southeast amounted to 50.6% of the national average and per capita disposable income payments amounted to 50.97%.

[12] *Cf.* below, p. 168.

[13] 1930 population, U. S. Bureau of Census.

[14] Represents the net income of unincorporated establishments, including farms, before owners' withdrawals.

[15] Includes dividends, interest, net rents, and royalties.

[16] Manufacturers' Record, *Blue Book of Southern Progress*, 1948.

[17] The population base for these calculations was chosen as follows: The 1938 calculation is based on the rural population of the South and the nation in the census of 1930. The 1946 calculation is based on the rural population found in the census of 1940.

[18] *Blue Book*, 1948.

and salary payments in the United States in 1946 than in 1929, 17.22 per cent and 13.79 per cent, respectively. However, total wage and salary payments made up a smaller portion of southern income in 1946 than in 1929 or 1940, 56.65 per cent, 58.20 per cent, 59.21 per cent, respectively. The same trend occurred in the nation as a whole. The decline in wages and salaries as a percentage of total income payments has been greater in the South than in the nation, both from 1929 to 1946 and from 1940 to 1946. From 1940 to 1946 in the area outside the South wages and salaries as a percentage of total income payments had declined only from 64.07 to 63.39 per cent; whereas, in the South the decline in wages and salaries had been from 59.21 per cent to 56.65 per cent of total income payments.

From 1940 to 1946 manufacturing payrolls as a percentage of total income payments in the Southeast decreased from 15.7 per cent to 15.5 per cent. The Southeast is the only section in the nation showing a decline of this nature during the 1940–46 period. It is apparent that while wages and salary payments in the South and Southeast have been increasing since 1929 relative to the nation, other factors are more responsible for the relatively greater improvement in total income payments in the southern area.

Agricultural income payments made up a larger portion of total income payments in the Southeast in 1946 (16.8 per cent) than in 1940 (15.4 per cent). With the decline in the importance of wages and salaries as a part of total income payments in the South from 1940 to 1946 and the rise in the relative importance of agricultural payments it is apparent that the improved income position of the South is due more to improved agricultural conditions than to industrialization.[19]

This fact has great significance for the future. Since the agricultural economy is so vulnerable to economic fluctuations, the relatively great advances in the income position of the South are constantly threatened by a collapse in agricultural commodity prices. Our economic stability is closely tied to the stability of the raw material markets of the world. The South still has a great stake in the government's ability to stabilize the agricultural market and to promote free trade.

The potential dependence on government authority for the protection of the South's income position relative to the nation is demonstrated also by the role played by government payments in the improved position of southeastern incomes. In 1929 the Southeast received 12.2 per cent of the nation's total government payments; in 1946, 17.39 per cent. Government payments[20] made up 8.5

[19] It is interesting to note that the wage earner's position in the South has shown marked improvement since 1939. An indication of this is the fact that in 1939 wages in the South made up 13.04% of the value of products produced (*Census of Manufactures*, 1939); in 1946, wages made up 17.77% of value of products (calculated from Manufacturers' Record, *Blue Book of Southern Progress*, 1948). Value added by manufacture did not show a comparable percentage increase compared to value of products. Value added is the sum out of which is paid all expenses other than wages, cost of raw materials, containers, power, and purchased electric energy. Value added made up 38.16% of the value of southern manufactured output in 1939 and 42.02% in 1946.

[20] Government payments include: payments of federal, state, and local civilian employees; net pay of the armed forces; family allowance pay to dependents of enlisted military personnel; voluntary allotments of military pay to individuals; mustering out pay; enlisted

per cent of southeastern income payments in 1929 and 22.0 per cent in 1946. In 1946 the Southeast received the largest portion of its total income payments from governments of any section in the nation. In 1946 a larger portion of total government payments came from federal (78.5 per cent) and a smaller portion from state and local government (17.4 per cent) than in any other section of the nation.

The South received a relatively larger share of the nation's property income[21] in 1946 than in 1929. Southern property income in 1929 amounted to 10.83 per cent of the nation's total property income and 15.11 per cent in 1946. Despite this improvement, property income in 1946 made up a smaller portion (8.17 per cent) of total southern income than in 1929 (13.32 per cent). This trend occurred in the nation, but the decline in the importance of property income was larger in the nation than in the South.

This indicates that the South is becoming a more important part of the nation as a source of investment funds and is supporting more of its own enterprise than in 1929. But with almost 19 per cent of the nation's income payments in 1946 the South received only 15.11 per cent of the nation's property income. Clearly dividends, interest, rents, and royalties are still flowing out of the South.

Proprietors' income[22] accounted for 25.68 per cent of total southern income payments in 1946 compared to 27.25 per cent in 1929 and 22.77 per cent in 1940. Over the last decade proprietors' income in the South has borne a stable relation to the total national proprietors' income payments amounting to 24.51 per cent of national proprietors' income in 1929 and 24.05 per cent in 1946.

It is significant that southern proprietors' income payments have made up a greater portion of the nation's proprietors' income payments (24.05 per cent in 1946) than the ratio of total southern individual income has borne to total national income payments (18.88 per cent in 1946). This has been due to the relatively greater significance of agriculture and small business in the southern economy.

Proprietors' income payments made up a smaller part of total *southern* income payments in 1946 than in 1929. Proprietors' income payments, however, made up 16.72 per cent of the *nation's* private income payments in 1929 and the share has increased to 20.17 per cent in 1946. This would indicate (a) that agriculture was more prosperous in the nation than in the South and (b) that the rate of growth of incorporated enterprise was larger in the South than in the nation during this period.

III

The improved income position of the South is reflected in its tax payments. In 1938 the South paid in individual income taxes 5.28 per cent of the nation's

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men's cash terminal leave pay; interest payments to individuals; public assistance and relief; veteran's pensions and benefits; state government bonuses to World War II veterans; benefits from social insurance.

[21] *Cf.* footnote 15.

[22] *Cf.* footnote 14.

total individual income tax payments.[23] In 1946 the South paid 13.50 per cent of the national total. With an estimate of 27.3 per cent of the nation's population in 1946,[24] and 18.88 per cent of the nation's individual income payments, the South paid only 13.50 per cent of the total federal income tax. Of the total federal tax paid by the South in 1946, 40.31 per cent was in the form of federal individual income taxes, whereas of the total federal tax paid in all states, 46.23 per cent was in individual income taxes. This is a reflection of the low per capita income of the South.

The relatively lower income of the South has compelled that section to pile "its tax burden on the back of those least able to pay in the form of sales taxes."[25] In 1938 "in every southern state, but one, 59 per cent of the revenue (was) raised by sales taxes."[26] In 1946 sales and gross receipts taxes amounted to 53.05 per cent of the total tax paid in the South.[27]

IV

Farm mortgage debt has declined all over the nation since the report of the President's Committee in 1938. But it has declined less in the South than in the nation. The South had 20.59 per cent of the total farm mortgage debt of the nation in 1935. In 1946 it had 23.46 per cent. In 1946 the South had 69.75 per cent of the total 1935 farm mortgate indebtedness whereas the nation as a whole had only 61.23 per cent.[28]

V

The South, as a result of its improved financial condition, is in a much better position to finance its own expansion than heretofore. Bank deposits have increased since 1936 from $5,119,641,000 to $22,440,140,000 in 1946, an increase of 338.3 per cent compared to an increase of 171.1 per cent for the nation during the same decade. The South in 1946 contained 14.39 per cent of the nation's deposits compared to 8.9 per cent in 1936.[29] The South's progress is notable, but with 18.88 per cent of the nation's income payments and 27.3 per cent of the nation's population in 1946 the South's financial independence as shown by bank deposits is still something to be desired.

VI

With rising incomes southern people are taking more heed of the morrow. With approximately 27.5 per cent of the nation's population in 1935 the South held only 13.59 per cent of the nation's life insurance. In 1946 it held 17.4 per cent. In the decade 1935 to 1946 the holdings of life insurance in the South increased 120.97 per cent, whereas life insurance holdings increased in the nation

[23] *Blue Book of Southern Progress*, 1939.
[24] *Ibid.*
[25] Report of the President's Committee, *op. cit.*, p. 23.
[26] *Ibid.*
[27] *Blue Book of Southern Progress*, 1948.
[28] *Ibid.*
[29] *Ibid.*

during the same decade 72.64 per cent.[30] With the importance of agricultural pursuits in the South, however, the ratio of the South's insurance to the nation is far from adequate since we do not share in social security to the extent that many other sections of the country enjoy that type of security.[31]

VII

The tendency of southern people to save out of their increased incomes is reflected in the level of interest rates. In 1936 interest rates charged customers by banks in New York City averaged 2.49 per cent; in eight northern and eastern cities, 3.52 per cent; and in 27 southern and western cities, 4.35 per cent. In 1946 the average in New York was 1.82 per cent; in seven other northern and eastern cities, 2.43 per cent; and in 11 southern and western cities, 2.85 per cent.[32]

VIII

The conclusions of this paper may be summarized as follows:

1. The development of the South during the last decade and a half has been complicated by such diverse factors that a thorough investigation of the economic position of the region is imperative.

2. The South has gained relative to the nation in total and per capita income payments since 1929. In 1946 it had not obtained its proper share of the nation's income payments as measured by the South's share of the country's population. In the first postwar year the South lagged behind the national gain in income payments. This is indicative of a weakness in the southern economy that may prevent it from retaining the wartime gains.

3. In 1946 the South enjoyed a larger share of the nation's wage and salary payments and property income payments than in 1929. Its share of the nation's proprietary income payments was less in 1946 than 1929 although in both years the South had a larger share of the nation's proprietors' income than of the nation's total income. This indicates that the South relies heavily on small unincorporated business including farms for its income. But there is a shift to incorporated firms, and from 1940 to 1946 southern agriculture failed to enjoy the same degree of improvement as that enjoyed by the national agricultural industry.

4. Despite the increase in wage and salary payments, total southern wage and salary payments and manufacturing wages and salaries made up a smaller portion of southern income payments in 1946 than in 1940. This means that the improvement in southern income since 1940 has come to a great extent from agriculture and from government payments. Since agricultural income (and to some degree, government payments) is subject to wide fluctuations unless stabilized by government action, this portends a grave problem for the South.

5. Interest, dividends, and rents have declined in importance as a source of

[30] *Ibid.*

[31] The Southeast in 1946 received only 8.69 per cent of social insurance payments in the nation. *Survey of Current Business*, Aug. 1947.

[32] *Federal Reserve Bulletin*, Jan. 1947.

southern income since 1929 but not so much as in the nation. This indicates a greater southern ability to finance its own activity than in 1929. This is also shown by the rapid growth in bank deposits and the decline in interest rates.

6. The southern farmer has not reduced his mortgage indebtedness as rapidly as the national level has fallen. This may be due in part to the tendency of tenants to purchase farms. In 1935, 54.85 per cent of southern farms were operated by tenants. In 1945 only 41.31 per cent were tenant operated.[33]

7. The South is gaining a high degree of security through insurance; but given its relatively small share in social security, there is still much to be desired in order to achieve the national average.

8. The low per capita income of the South affects 27 per cent of the nation's population. This means that one-fourth of the nation's people depend on federal aid to a large degree. This is shown by the relatively small income received in the South from state and local governments and the large income derived from federal sources.

9. The low but rising per capita income of the South makes it a good market for low priced consumer goods. This may be illustrated by the following indices showing the increase in retail sales in the United States and its 12 Federal Reserve Districts, 1939–46: Dallas,[34] 241; Atlanta, 232; San Francisco, 197; Kansas City, 183; St. Louis, 181; Richmond, 180; Cleveland, 151; Chicago, 143; Minneapolis, 141; Philadelphia, 132; New York, 119; Boston, 117; United States, 158.[35]

[33] *Blue Book*, 1948.

[34] A part of the Dallas Federal Reserve District has been included in "The South" in this paper.

[35] *Federal Reserve Bulletin*, Jan. 1948.

RESTRICTIVE PRACTICES OF UNIONISM

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I

Throughout most of their history, American trade unions have found it necessary to struggle for their very existence. Within the past decade, that struggle has been greatly alleviated with the passage of legislation that has encouraged and accepted trade unionism as a legitimate and desirable instrument of workers in an industrial society. As unions have grown in membership, resources, and power, and as militant anti-unionism on the part of employers has given way to the acceptance of collective bargaining, public attention has been focused on the *practices* of unions.

As a result, the last two decades have seen a progressive expansion of statutory regulation of labor relations. Along with such conscious legislative effort, there has also evolved a sort of common law of rights and duties affecting workers and employers alike—as termed by Professor Slichter, a type of "industrial jurisprudence."[1] It seems important to examine this new body of labor-employer practices to see to what degree it coincides with the public interest. One of the controversial facets of the new industrial jurisprudence is that of "make-work" regulations, the "stretch-out," the "slow-down," "featherbedding," or what is generally termed in this paper the restrictive practices of unionism.

An implicit assumption of this discussion is that restrictive practices do exist in modern unionism. Even superficial research is able to disclose this fact. Much contemporary literature, especially in popular publications, has pointed out the practices and highlighted the problems incipient therein. More technical discussions of this ilk may be found within the hallowed covers of our professional periodicals.[2] Even the actual participants in such restrictive practices admit their existence. Richard Gray, president of the Building and Construction Trades Department of the American Federation of Labor, in his recent appearance before the Congressional Committee on Housing, stated:

> . . . . I am not appearing before this Committee to contend that everyone in the ranks of unions is blameless, that all trade unionists are devoid of sin, or that there have not been instances of abuses within labor's ranks. On the contrary, . . . there have been, are today, and will undoubtedly be in the future, instances of unreasonable actions, of abuses and dishonesty among labor men. . . .[3]

The official records of the United States Department of Justice, Antitrust Divi-

[1] Sumner H. Slichter, *Union Policies and Industrial Management*, pp. 1–8.

[2] For example, see George Soule, "Organized Labor's Role in Our Economic Life," *Annals of the American Academy of Political and Social Science*, March 1936, p. 4.

[3] Richard Gray, *Statement Before the Joint Committee on Housing of the Congress of the United States*, Jan. 14, 1948 (Mimeographed), American Federation of Labor, Washington, D. C., 1948, p. 6.

sion, corroborate the existence of restrictive practices by unions; and several other governmental entities, including the Bureau of Labor Statistics, have made reports on productivity in which interpretative inference discloses a condition of production restriction. It borders on levity to indicate that even some employers are aware of restrictions. Informed opinion uniformly agrees that the common welfare has been invaded with disquieting frequency through restrictive trade practices.

Before examination of the details of some specific actions, it seems well to indicate that most progressive unions have made an honest effort either to prevent or to uproot existing restrictive practices. Public pronouncement of such a policy has been made by John L. Lewis, Philip Murray, and Richard Gray, as well as other significant labor leaders. Perhaps it should be mentioned here that a few of the national unions have announced their intentions in this direction publicly in a voice of thunder, but their canons of regulation for the locals were transmitted as a barely audible whisper. Despite some hypocrisy in this regard, attainments of consequence have been made by the unions themselves in eliminating restrictive operative methodologies. Restrictive efforts are *not* a general labor practice, but still flourish in a number of important industries, most often in those organized by old-line, tightly knit, craft unions. These abuses stand out strongly—are, so to say, institutionalized—in the building trades, the printing unions, the entertainment unions, and the teamsters unions, all of the A. F. of L. They are popular also in the independent railroad brotherhoods as well as in the automobile and rubber industries, which are primarily C. I. O. Conservative estimates place the number of members in unions practicing such restrictions at about $3\frac{1}{4}$ million within the A. F. of L., $1\frac{1}{4}$ million in the C. I. O., and $\frac{1}{2}$ million in the independent unions. This makes a total union membership engaging in restrictive practices of something over 5 million, or almost one-third of the total union membership of the United States. Two-thirds of America's union members engage in restrictive practices only sporadically if at all. May it again be emphasized that the policy of restriction is *not* an invariable practice of unionism.

There is no common parentage of restrictive practices. Many of the restrictions are obvious and formal, having been written into collective agreements. It is important to notice that most of those included in contracts are hidden under headings of wages, safety rules, or working condition clauses. More than half are not included in agreements. Some are customs and practices of the trade, or are the result of informal group pressures. Others are to be found in union constitutions, bylaws, and rules. A significant number have been the result of employer sanction and support. Their diversities of origin are legion. In even greater variety are the practices themselves. They range from those of pleasant employer cooperation to those enforced through intimidation and coercion. As a device of logical convenience, they may be segregated into five major categories: restrictions upon technological improvements in processes and machinery; restrictions upon the use of prefabricated products; rules requiring performance of unnecessary work; rules requiring the hiring of unnecessary men; and limitations upon employee output. Discussion will follow the order of citation.

II

Since their inception, laborers have faced the spectre of technological displacement. No union has been insulated completely from this haunting fear. The boot and show workers had to adjust first to the MacKay sewing machine, and later to the lasting machine and heeler; the window glass workers, first to the cylinder machine and later to the sheet drawing machine; the glass bottle blowers, to a machine which increased individual productivity by 4,000 per cent; potters, to the casting process; telegraphers, to the teletype; street railwaymen, to the one-man car; clothing workers, to the pressing machine and electric cutters; and steel workers, to the continuous-strip mill. The examples might be pursued ad infinitum. No age has been devoid of pressing technological problems.

No period has seen more rapid technological development than the last decade. Under the dual incentive of a manpower shortage and a grim war of production, our machine processes leaped forward perhaps 25 years in the relatively brief period of World War II. It may seem surprising that unions have not been more concerned with this great change. The reason seems to be that the changes occurred at a time of rapid economic expansion which minimized the displacement caused by any given change and helped the displaced workmen find new jobs. Characteristically, union restrictive policies against technological change are weak in prosperous times. But already labor is beginning to look upon postwar technological changes with uneasiness, for whatever the long-range views of its leaders, a union faces immediate and unwelcome problems. Instance after instance may be cited where union leaders recognized the futility of trying to stop progress, yet were compelled to try it by the rank and file of their membership. A person who has spent years learning and practicing a skilled trade only to be displaced by a machine doesn't receive profound solace in the thought that more machine production lowers costs, increases demand, and ultimately means more employment. What may mean more jobs in the future means no job at all in the present. We often lose sight of the fact that unions are composed of persons who have families to support. Their point of view is the short-run variety because in the long run they may starve. A policy of opposition to technological change may not then be economically sound from a detached point of view but it is at least understandable on a humane basis.

Technological changes introduced for private profit have as a rule ignored the workers' interest. Under the simple and basic motivating force of self-preservation, the unions have been driven to defend themselves. At first, they may attempt to conquer the machine by refusing to work with it or by trying to prevent others from doing so. This is the tactic of obstruction. Through collective bargaining or by law, they may try to limit its use or compel employment of a greater work force than normal conduct of operations warrants. These are tactics of restriction. Or workers may recognize the ultimate uselessness of opposing technological progress and may try to cushion the shock of the change—again through collective bargaining. This is the tactic of adjustment. Restrictive practices then fall generally into the tactics of obstruction, of restriction, or of adjustment. Obstruction is generally outmoded—restriction and adjustment remain obdurate bedfellows of technological change.

Restrictive policies have worked themselves out through interesting specific cases. Characteristic instances, reasonably well verified, may be cited. In New York, the truck drivers of the teamsters' union refuse to allow the cement mixer to operate while the truck is moving. When a truck is driven to the site, an operating engineer steps up and pushes the button that starts the mixer. In Chicago, the situation is simpler; there is an outright prohibition against the use of cement-mixing trucks. Also in Chicago, the musicians' union will not allow recordings to be played over sound trucks: if you must electioneer, a van load of live musicians softens the crowd up—not the spinning disk, a product of technology. Union interdictions against the paint spray gun are common. In New York, mortar for brick-laying may not be delivered in bulk. Everyone is familiar with the recent attitude of the musicians' union toward recordings. Examples could be extended indefinitely. It is sufficient to identify the type and show that its occurrence is frequent.

III

The unions' restrictive policy toward prefabricated products shows close kinship with their attitude toward technological advancement. Most prefabrication stems from large-scale line-production, standardization of product, and machine employment—otherwise few, if any, economies would be achieved. Restrictive efforts directed against prefabrication, then, are in reality a struggle against technology, even if but one step removed. Union behavior is replete with interesting examples of this type of restriction. The A. F. of L. building trades offer the best illustrations. Plumbers in Chicago refuse to install prefabricated equipment. The same situation prevails in New York, where toilet, lavatory, and other fixtures which have been factory assembled will not be installed. Likewise, carpenters refuse to install wallboard. In many other localities, the plumbers are insistent that all pipe be cut, threaded, and measured on the job. Stirrups for reenforcing concrete may be bent only by hand even though they can be prefabricated at a small fraction of that cost. Not unusual today are rules against the installation of factory-glazed windows or of factory-made and painted kitchen cabinets. In Chicago, all sash frames and screens must be primed, painted, and glazed on the job. Numerous other illustrations could be cited.

The obvious dis-economies of such practices have worked to the detriment of the A. F. L. in competition with the C. I. O. For example, Bradford Homes, Incorporated, of Evansville, Indiana, signed up with the C. I. O. United Construction Workers. The C. I. O. was not interested in preserving the craft practices so zealously guarded by the A. F. of L. They permitted power equipment, spray painting, and the erection of a wood-mill and a cement-mixing plant. All wood parts were precut in the mill, and any savings through prefabrication by the builder were encouraged. More than $1,000 a house was saved by these methods. If this is the shadow of things to come, prefabrication may flourish with the blessing of C. I. O., despite the obstructive tactics of the A. F. of L.

IV

The make-work rules of unionism may include completely superfluous activity or the repetition of a job already performed. In New York, for instance, the electricians' local has refused to install switchboards, elevators, and other electrical apparatus unless the wiring performed in the manufacturing plant was torn out and union members permitted to rewire the apparatus. One of the most famous policies is that of the International Typographical Union, which requires that, when plates or papier-maché matrices are exchanged between publishers, the matter must be reset, read, and corrected within a stipulated period and proof of such action submitted to the union chairman.[4] In Chicago, if hardware is factory-installed on cabinets, the local carpenters remove the hardware and reinstall it. A $2,500,000 low-rent apartment house for workers in New York planned to utilize an electric refrigerator in every kitchen. The plumbers' union insisted on installing drains under each of these mechanical refrigerators. The painters' union often insists on three coats of paint when two would suffice; or the plasterers force the use of three coats of plaster when one less would satisfy all specifications and building code requirements. The New York plasterers' local has required that stock models be destroyed in order to provide work for the molders. In October 1940, in the construction of the Social Security Building, the Washington painters' local refused to apply a resinol base paint that requires only two coasts, instead of the usual four coats of lead and oil paints. Further multiplication of instances, though possible, would add nothing to our recognition of this type of restrictive action.

V

One of the simplest ways of creating employment is to require that an unnecessarily large number of men be employed to do a given task. Lacking complexity, or the necessity of much imagination, this is perhaps the most prevalent of union restrictive activities. In many cities, when a carpenter sets an iron beam, a union ironworker must be called to stand by—and draw pay. In Houston, when structural steel is delivered, the truck driver stops at the gate, and ironworkers drive the truck in and unload it. In Kansas City, contractors find it necessary to employ a cement finisher whenever concrete is poured for more than two hours at a time, even for concrete work in home building where no finishing is required. When plumbing equipment is being delivered to a job in Chicago, the union insists that a member must ride in the cab with the truck-driver. He performs no function but draws full wages. Over-the-road truckers must stop at the city limits in New York and a "pilot-driver" takes over for the city driving. The musicians' union makes it necessary to hire double the number of musicians if the broadcast goes out over both standard and FM circuits. When an out-of-town band arrives at any New York theater in taxis or busses, the New York

[4] Strange as it may seem, this notorious rule was not originally passed merelv to make work. It dates from the time when compositors were paid by the piece, and its purpose was to protect the compositors against loss of the more profitable piecework jobs.

teamsters must carry the band's instruments across the sidewalk—at $20 per teamster. One of the best known rules is that of the International Association of Machinists, prohibiting members from operating more than one machine in shops where such a practice is not established. Printing presses that have been operated with a crew of five in New York City have been moved to Chicago and operated under equally valid union requirements with a crew of three. One of the most ambitious efforts to make work by requiring excessive crews or the employment of unnecessary men is being made, with great success, by the train service unions. At their instigation, more than 21 states have passed "full-crew" laws and several states (Arizona, Nevada, Louisiana, and Oklahoma) limit the length of freight trains. The transportation unions have insisted on the employment of firemen on diesel locomotives, though diesels used in switching on slow branch-line service have absolutely no need for a second man. Perhaps the most significant of all make-work rules on the railroad is the dual method of compensation in train service. A day's work is defined as so many hours or so many miles. For example, in freight service a day's work for an engineer or fireman is either 100 miles or 8 hours and in passenger service 150 miles or 8 hours. Under this pay schedule, outmoded by technological improvements, an engineer on a crack passenger train sometimes finds it necessary to work only two hours to obtain a full day's pay. It is estimated that the work-rules on the railroads keep thousands of men in railroad service who are not needed there. The examples are intriguing but endless.

VI

It may be reasonable in many cases to limit employee output for health and safety reasons—and often this necessity becomes a matter of difficult judgment. In other cases, though, it is completely evident that restriction, operating in accordance with the "lump-of-work" theory, is being practiced. Formal limits upon output are not especially common in trade agreements or even in union rules, but informal limits are not unusual. They are found more frequently among pieceworkers than among timeworkers. Unions employ such practices not merely to increase or protect immediate employment opportunities but also to prolong trade life. This latter objective is attained by controlling speed. It is not uncommon in incentive pay systems "to have an understanding" about the maximum allowable units to be produced. As machine methods improve, it often becomes possible for a worker to produce two or more times the agreed maximum. The Mead Senate Committee investigating war industries in Detroit, in the case of the Briggs Manufacturing Company found production reduced 40 per cent by keeping low flames in the workers' torches. In Detroit, lathers put up no more than 35 bundles of lath a day. Before the war 2½ times this number was not unusual. In Chicago, the lathers may not cover more than 10 square yards in a day. In many localities, longshoremen limit a ship's loading sling to a one-ton load although the usual capacity of a sling is close to four tons. Utilizing this as well as other restrictions, the San Francisco longshoremen reduced the number of tons moved per man-hour by 33 per cent in the period

1933–1938. The standard of competence for members of the Typographical Union ranges from 4,000 ems in Cincinnati to 8,000 in Memphis. One of the most controversial charges of restrictive practice made against unions is that painters limit the size of the paint brush to $4\frac{1}{2}$ inches. Washington headquarters of the Building Trades deny that such restrictions exist. The facts show that in Chicago, Memphis, and Scranton as well as in other localities the width of the paint brush *is* restricted to $4\frac{1}{2}$ inches. In Dayton and Wilkes-Barre it is one-half inch narrower. The practice is obviously prevalent.

VII

We have taken occasion to cite numerous examples of restrictive practices. These are interesting in their devious workings. Of more significance than these particularities however, are the generalities of motivation, selfish logic, or economic rationalization which run vertically through the structure of union restrictive practices.

One might easily infer from the foregoing list of restrictive activities that unionization is the sole sponsor of monopolistic practices. This would be rather an uninformed interpretation. It is abundantly evident today that competition as it prevailed during the nineteenth century is on the retreat. Despite the impotence of our antitrust laws and the liberality of the "rule of reason" of the Supreme Court, the Attorney-General's docket is crowded to overflowing with antitrust prosecutions.[5] Particularly in the field of consumer goods, national pricing policies and various types of marketing agreements and collaborations have made a mockery of our competitive economy. We should be reluctant to set up moral standards for unionism higher than those established for the rest of us. This is not by way of defense of union restrictive practices or an endeavor to show benefit to public interest by such restriction. It is merely to say that we should be able to understand the union's position as part of a larger problem. We need to tackle the whole question of monopoly and monopolistic practices. Unionism has merely conformed, on a "survival-of-the-fittest" basis, to the general pattern of monopoly developing within our country. It is at terrific sacrifice that society tolerates such restrictive practices, but the relative cost is no greater than that occasioned by the sugar tariff, protection of aluminum interests, or the increase of the price of petroleum products in the face of the highest profit margin in the history of the industry. The unions' actions are just as defensible as the actions of the farmers in urging parity prices, crop loans, or governmental payments for restricted production.

Also, interestingly enough, union labor is not the only segment of our working force given to restrictive tactics. Nonunion labor under many circumstances and under varied working conditions has shown the same tendency. This is particularly true in the matter of limitation of output under incentive systems or under the workers' philosophy of "share-the-work."[6] Rather than being con-

[5] For pending antitrust roster see *Business Week*, Jan. 3, 1948, pp. 22–23.

[6] For instance, see S. B. Mathewson, *Restriction of Output Among Unorganized Workers*, *passim*.

fined to union workers alone, restrictive practices are found throughout the whole of the labor force. This paper deals only with restrictive practices in unionism because it is around those practices that public criticism has solidified. The point that needs to be made is that we have publicized and unified public opinion and criticism against restrictive practices in unionism and, at the same time, either by design or negligence have insulated other equally guilty segments of society from the same attacks.

Employers also are not above adoption of equally restrictive tactics. Our building codes, for example, are replete with make-work rules for the benefit of contractors. There can be no question but that improved processes and new inventions have been smothered by businessmen whose fortunes have been threatened by the impact of innovations. Holding back the dial telephone because it eliminated the need for a great deal of telephone equipment is a case in point. The railroads fought the Panama Canal, busses, and airlines. Existing retail outlets oppose chainstores and supermarkets; glass bottle manufacturers have sought to prevent the use of paper milk bottles; small bankers fight branch banking; and the NRA codes were full of restrictions on the introduction of new equipment. The present mode of railroad compensation was set up by the employers as an incentive system to increase the speed of train schedules. By refusing to alter the mileage basis in the face of advancing railroad technology the unions have made it a restrictive practice. Some restrictive practices, although nominally imposed by the unions, are actually for the benefit of the employers and were established first at their insistence. The flint glass workers' union, for instance, was encouraged by the lamp chimney manufacturers to fight the lamp chimney machine. The operators of thin-vein mines supported the efforts of the United Mine Workers to restrict the use of coal cutters by the thick-vein mines. These examples simply serve to emphasize that there is more than one dark complexioned gentleman in the proverbial woodpile.

There are other facets to our attacks upon restrictive practices in unionism which make interesting exploration. There is but little doubt that such practices exact a heavy toll from the American public. To appraise the exact cost is most difficult. Each trade, each contract, is a question in itself. It is a problem which cannot be answered except by a minute examination of each example. Mr. William Haber, after several years' study of the problem, comes to the conclusion that it is not possible to measure the full effect of restrictions but "they overstep the bounds of desirable regulation—and obstruct progress of industry." The Department of Justice has accumulated considerable information on the subject. Before the war, according to the Department, it cost one thousand dollars more to build a six-room house in Cleveland than in nearby cities where conditions were the same except for restrictive rules. They also estimated that "labor restrictions on production, which have nothing to do with wages, hours, or conditions of labor, are today costing the American consumer over one billion dollars a year." "Restrictive labor practices," says Professor Corwin D. Edwards, "are among the most conspicuous causes of waste in industry." Professor Robert K. Burns, in a survey of restrictive practices in newspaper printing,

concluded that such practices "raised costs and prevented needed economies." One may supplement this generality of conclusion by countless specific examples. All of them point to one conclusion—restrictive practices cost the American consumer heavily.

This conclusion, however, does not complete our examination. Let us look at the construction industry where union restrictions are most obvious. The cost theme can then be more fully developed. Admittedly, wage scales do not reflect "restrictive cost" but, on a relative basis, they are revealing. The wage scale in the building trades rose from 100.0 in June 1939 to 147.9 in July 1947—an increase of 47.9 points over the period.[7] During the same period, all building materials increased 107 per cent—but lumber increased 222 per cent and paint materials by 155 per cent.[8] If we convert the building material index to a 1939 base, we find that the level reached in July 1947 is 185.3 or 85.3 points over the base period in comparison with 47.3 for wages. The increase in materials cost was almost double that of wages. This still is not the complete story. In 1940, the average total site construction cost of residential dwelling units was $4,065. The average selling price in that year was about $5,250—a profit margin of $1185. For September 1947, the total construction cost of a single-family house was $6,348 and the selling price is in excess of $8500—a profit margin of $2152.[9] To those inclined toward absolute data, there appear to be several other flies in this expensive public ointment. To achieve a still more complete conception of restrictive practice cost, let us note that, according to the United States Bureau of Labor Statistics, the site cost of labor on housing was 37.3 per cent of construction cost in 1932, 32.3 per cent in 1940, and 31 per cent in 1947. To those inclined to interpretative data, it appears that the total wage increase for construction labor plus the total "restrictive cost" has not quite managed to stay abreast of other construction costs. Here again it is opportune to have a complete body X-ray.

As a sidelight, it might be pointed out that virtually all housing is today sold under long-term mortgages and the cost of interest and amortization represents the largest share of the cost of shelter. Under standard FHA mortgage procedure, the home owner pays as much for interest and amortization as he does for the house itself. If you reduce the site cost of labor 50 per cent you would reduce the monthly payments on the average single-family home only 8 per cent. The publicity accorded labor in such articles as "Gangsters Don't Build Homes," "The Labor Slow-down," the "Low-down on the Slow-down," etc., frankly do not intend to represent all the facts. Such publicity has influenced us to believe that the building crisis is directly and completely attributable to labor. The restrictions of labor have contributed significantly to short production on homes but there is reasonable doubt that labor has been the primary delinquent.

That restrictive tactics on the part of unions have cut potential productivity is an accepted fact. Much has been written concerning this declining "work-

[7] *Monthly Labor Review*, Jan. 1948, p. 51.
[8] *Monthly Labor Review*, April 1948, p. 474.
[9] Richard Gray, *op. cit.*, p. 12.

effect"—some of it technical and some acrimonious. This national debate has taken a singularly unproductive turn. Productivity is down, but once again we are in no position to suggest monistic causation. Low labor productivity is oftentimes due to poor management. The productivity picture at this time, however, is more complex. Part of its causation stretches back to the depression era of the thirties. In 1932, all business activity was severely curtailed. As a result, trades which would normally expect new and younger workers for apprenticeships or training did not receive them. Reserve skills were therefore not available in number when business demanded them in the period just preceding the war. Labor was rapidly acquiring productive stature when the war intervened. The labor force was severely cut by the draft and had to be replenished through use of newcomers to industry (chiefly women) or with over-age or handicapped persons. Add to this the "cost-plus" contracts of the war, which gave little attention to proper manpower allocation or use, and it becomes apparent why the productivity of labor hit new lows. In the initial postwar period, there seems little doubt that a let-down occurred. Men fresh from the army took a while to get back into harness. Certainly one reason for low productivity in this period has been the fact that production lines have been run on a "go-stop" basis caused by a shortage of parts and materials. Only during 1947 has anything approaching normality been experienced. Advanced technology, wholesale installation of incentive systems, and a seasoned work-force should give us new productive records. We are only now in a position to see just how much restrictive practices are going to injure production; prior to this time the picture has been far too complex for competent judgment. As a matter of record, productivity is being significantly increased—447 companies report an average of 5.3 per cent increase in 1947.[10] In 1947, 745,000 dwelling units were completed. In 1946, only 437,800 were completed.[11] Building has taken a very promising stride forward. Despite the fact that productivity is on the increase, we are far from fulfilling the promises made during the war regarding our productive potentialities. There is little doubt that restrictive practices of unionism are a retarding influence but, with a paucity of evidence before us, no one can say with accuracy whether or not they are a major brake upon our industrial output.

VIII

Now we may well ask, "What is the basic reason or reasons behind union restrictive policy and what may be done about it?" The unions appear to the writer to have adopted fallacious economic reasoning in at least two regards. Nearly all unions take it for granted that the demand for labor is inelastic and that the volume of employment and the income of their members would not be maintained or increased by making concessions in wages or make-work rules. This is an understandable error because, if very brief periods of time are considered, demand for most types of labor by a plant or industry is inelastic. It rapidly rises in elasticity, however, as the period of time increases. At any rate,

[10] "What's Happening to Productivity?" *Factory Management and Maintenance*, Sept. 1947, p. 66.

[11] *Monthly Labor Review*, Jan. 1948, p. 127.

the fact that most unions have been in the habit of underestimating the elasticity of the demand for their labor greatly increases the difficulty of persuading the unions to consider a policy of relaxation.

While groping for some justification for restrictive practices, unions have adopted the "lump-of-labor" line of thinking. This reasons that there is only so much work to be done, so the longer you make it last, the longer you will have a job. It should be recognized that this rationalization is contrary to even some of the methodology of restrictive practices, but nevertheless it is deeply ingrained in union attitude. The theory, or course, would be valid if demand were constant, regardless of price. Under the majority of circumstances, however, this just is not the sitation. Being persuaded to the lump-of-labor doctrine, unions are unreasonably adamant in maintaining certain types of restrictive practices.

We can be reasonably sure that few labor leaders and ever fewer union members realize just what line of economic rationalization they follow. More basic to their thinking is the insecurity of employment in modern industry. The wage earner lives in a world in which demand for labor is constantly changing in quantity, in kind, and in location. Labor turnover rates, reported by the Bureau of Labor Statistics, are significantly high. Even the workers attached to a single employer may not have full employment throughout the year. Seasonal fluctuations, sporadic demand, technological innovations, and geographical shifts of industry, all contribute to this situation. Since employment is uncertain and fluctuating, and much of it for a short term, it is not surprising that wage earners, both organized and unorganized, seek to increase or maintain their employment by restrictive practices.

> .... Economic life presents us always with a choice of evils and no course of policy is the best for everyone. There will always be some who prefer the disease to any possible treatment that can be proposed for it, and the question of remedies remains in dispute even when the diagnosis is agreed upon....[12]

In the case of restrictive labor policies, it is a great deal easier to diagnose than propose a remedy. Some opponents advocate a head-on approach with legislation and prosecution. Under the Sherman Act, the Antitrust Division of the Department of Justice commenced in 1938 a campaign of prosecutions directed against the restrictive practices of unionism. In a series of cases, however, the Supreme Court virtually read the Sherman Act completely out of the field of labor relations. No other attempts at prosecution have been made. There does not appear to be any statutory method by which to describe the practices which are undesirable without at the same time prohibiting contractual provisions which are desirable and necessary. Any attempt to do so would bog down in sheer administrative unworkability. A different rule would have to be made for each case, and each decision might depend upon exceedingly technical and complex facts. The only direct method of public control would be some scheme which would provide for government dictation of nearly all the nonwage provisions of every collective bargaining agreement. But in addition, the government, to expose the "oral agreement" phase of restrictive practices,

[12] Joan Robinson, *Introduction to the Theory of Employment*, p. 1.

would need a Federal Bureau of Investigation whose size would create a sizable dent in the national budget. Then there remains the question of how you would visit judicial displeasure upon the culprits. To levy fines would be one sure way to lower worker morale and raise antagonisms which would be immediately reflected in productivity. The other alternative of jailing the culprits would stop all production. It seems obvious that legislative efforts would present an enforcement conundrum to which no one has an adequate answer.

Some of the restrictive practices of unionism seem to be outlawed by the Taft-Hartley Act. For example, Section 8 (b) (6) of this act makes it an unfair labor practice "to cause or attempt to cause an employer to pay or deliver or agree to pay or deliver any money or other things of value, in the nature of an exaction, for services which are not performed or not to be performed."[13] Perusal of congressional testimony and debate discloses this section to be an attempt to eliminate the restrictive practice of "featherbedding" or requiring more workers than necessary to perform a given task. It conceivably, by judicial interpretation, might also be made applicable to restrictive rules requiring the performance of unnecessary work. Only time and court decision, however, can offer evaluation on that score.

Another direct approach to the problem is through collective bargaining. Restrictive practices are particularly troublesome in this area. In actual trading with the unions, management is far more inclined to give way on a demand for a work rule than a wage increase. Ordinarily the sales resistance to restrictive rules is comparatively low. Wages can be computed easily; often the consequences of a restriction cannot; so the average employer, even when his interest is against the restraint, will concede the rule in return for the wage. Once a rule is integrated in a collective agreement, you can almost never get it out. Thus, the approach to the problem through collective bargain is one fraught with difficulty. The first big objective should be to get the subject of restriction out in the open on the bargaining table where the curbs can be examined and discussed. In return for wage or other concessions being asked by a union, the employer can ask for the elimination of restrictive practices by his labor force. This was done with great success in the ladies' garment industry. The unions abandoned their restrictive rules in exchange for better pay and greater job security. Both sides are satisfied that they are now benefiting from the arrangement. Collective bargaining concessions in the form of guaranteed annual wages might eliminate the unions' fear of insecurity of employment and bring about a relaxation of restrictive practices. Several international union headquarters have indicated that labor would be interested in such a bargain.[14] It appears that this plan may have real merit for highly seasonal industries or industries which are afflicted with sporadic demand. Evidence inclines one to believe that no *direct*

[13] As a sidelight, it might be observed that labor is now wondering whether the broad generality of the working of this section will be construed so as to eliminate paid vacations, rest periods, etc. Congressional testimony by Senator Taft discloses it was not originally intended to cover such instances. Court decision, however, may be another thing.

[14] At the last national conventions of both the C.I.O. and the A.F. of L., the guaranteed annual wage was prominent in discussions of future collective bargaining objectives.

approach to eliminating restrictive practices can be successful unless it is a result of action by agreement of the parties and with the cooperation of all concerned. No other way reaches the informal understandings which are common to shop practice.

The unions are not without means of assisting the ease of transition from restrictive to nonrestrictive practices. Policies aimed at increasing worker mobility, such as retraining programs, or cooperative employer-union planning to allow gradual adjustment to industrial change, might do much towards alleviating the distress of displacement or dismissal. Though not likely of accomplishment, a broader type of union organization makes unnecessary, from the union's point of view, the rigorous practice of restriction. The narrow craft units of the A. F. of L., for the purpose of self-survival, feel that restriction is imperative. On the other hand, the industrially organized C. I. O. finds only an insignificant part of its membership affected, at any one time, by the external influences against which unions direct restrictive policies. Consequently the C. I. O. finds little need for restriction. It is almost axiomatic that the narrower the union organization, the greater is the incentive to restrict. Happily now the A. F. of L. is beginning to relax its policy, previously committed to tight craft organization, to allow broader organization.

Indirect methods of attack upon restrictions hit at the basic problem involved. Great progress can be made against restrictive practices only when we attack the underlying cause of it—the fear of unemployment. Adequate unemployment compensation in terms of broader and more comprehensive coverage, as well as in terms of higher compensation, can wipe out some of labors' fears. Especially does this alleviate the fears of people whose work is irregular or who are threatened with temporary unemployment because of technological improvements. Central governmental planning for maximum employment and the easing of business fluctuations, both seasonal and cyclical, would offer great help. Perhaps this is what the President had in mind when in his Economic Report of January 1948 he says:

> No matter how stable a particular business, industry, or region may be, it can rarely avoid unemployment in the event of a serious depression. A national policy of vigorously promoting maximum employment will be the longest step toward the sense of individual security which is conducive to high productivity.[15]
>
> . . . .
>
> Maximum production must be based upon proof that it is not self-defeating. Only by providing alternative jobs for those who suffer displacement, and by ironing out the fluctuations in business, can we convince both labor and industry that restrictive tendencies are unnecessary for them as well as hurtful to the economy as a whole.[16]

It is evident now that one might tackle the problem of restrictive practices in unionism either directly through legislation or collective bargaining, or indirectly through governmental effort. In the writer's opinion, constructive collective bargaining plus intelligent planning by the government would go far in eliminating the abuses abounding in the restrictive practices of labor.

[15] *The Economic Reports of the President*, p. 72.

[16] *Ibid.*, p. 73.

THE NORTH-SOUTH DIFFERENTIAL—A DIFFERENT VIEW

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I

For many years the question of the southern wage differential has constantly cropped up in economic discussion. Business firms, in planning their industrial location, usually keep one eye on wage rates and their relation to productivity. In government economic planning, as in the NRA and in other minimum wage discussion, and war- and peace-time procurement, the southern wage differential has become more than a topic of economic discussion, it is a frequent bone of political and social contention. As a result of these practical considerations, and as a result of more scientific investigations, certain conclusions seem evident, one being that certain classes of skilled workers in the South, possibly because of their relative fewness, typically earn higher wages than persons engaged in the same occupations in the North. By and large, nevertheless, there is the general acceptance that northern wage earners on the average tend to earn more than southern wage earners.

In this article the question of the North-South differential (in 1939) will be investigated and an attempt to discover the structure of a particular aspect of the North-South differential will be made. Instead of stressing wage rates, *annual earnings* will provide the basis for analysis. The reason for this is threefold. First, hourly rates recurrently receive the attention of statisticians and economists; second, income (annual earnings) considerations have a great importance in welfare comparisons and analyses; and, third, annual earnings analysis is interesting and significant in any general consideration of social and economic structure and process.

Wage rate differentials between companies or areas are likely to be of great importance in determining whether a particular firm's costs are going to be high or low relative to competitors, and whether it will be able to secure the necessary labor that it needs and wants. This consideration grows in importance as profit margins decline and competition grows sharp, for then all variable costs undergo progressively greater scrutiny. Differentials in labor costs between and among firms in different markets or even in the same market are, in the opinion of the present authors, *not* controlling with respect to relative profitability. Other cost and selling factors may, and in many instances do, far outweigh the wage questions, yet (and this is the significant point) low labor costs, *ceteris paribus*, are better than high labor costs when the final profit reckoning is made.[1]

The assumption of the preceding discussion is that costs in relation to income are the important determinant of industrial policy, an assumption which appears

[1] *Cf.* Lester and Shister, editors, *Insights into Labor Issues*, Chap. XI, "Some Aspects of Labor Market Structure," by L. G. Reynolds.

eminently reasonable. Deeper, however, is the reliance on the notion that wage rates are the important factor in determining labor costs. This view stresses the supply-cost side of the analysis. An equally cogent case could be made throwing the light of analysis on the factoral demand side, especially from the long-run point of view, i.e., in terms of in-or-out-migration, labor training, labor skill, etc. Parenthetically it should be noted that annual labor earnings are probably of secondary importance in determining the location of new plants. Service trades or industries, of course, would be concerned with size and regularity of community income, but what might be considered prime producers would not be greatly concerned.

II

Ideally an analysis of annual income differentials should be cast in terms of wage rates broken down by occupations, by sex, by race, by size of plant (investment). The data should then be analyzed in terms of average hours of work per week, and actual hours of work per year. Unfortunately, in research ideal data are almost never available, so that the analysis must make use of such data as are

TABLE I

Population Groups

GROUP	POPULATION
1	1,000,000 and over
2	500,000 and under 1,000,000
3	250,000 and under 500,000
4	100,000 and under 250,000
5	40,000 and under 100,000

at hand. This leads to approximate or related findings rather than to the findings and conclusions directly and specifically sought. Research usually limits the area of error rather than exactly defining the truth.

In preparing the present analysis the working populations of North and South were categorized according to market areas, as suggested by the J. Walter Thompson Company Market Map,[2] into five groups. Market area is defined as a population center without reference to municipal, county, or state boundaries. It is a "concentration of people concept" rather than a political concept. The Mississippi River was considered the dividing line between East and West and states west of the Mississippi are excluded from the ensuing discussion, with the exceptions of Missouri, Arkansas, and Louisiana.[3]

The market areas were classified into five sizes as given in Table I. Markets of under 40,000 were neglected because their total employment is relatively insig-

[2] Copyright by the American Map Company, Inc., New York, showing the city sizes, urban and rural character of the United States population. The data apply to 1939.

[3] The northern states are Maine, Vermont, New Hampshire, Massachusetts, New York, Connecticut, Pennsylvania, Rhode Island, Ohio, Indiana, Illinois, Michigan, New Jersey, and Delaware. The southern states are Florida, Georgia, Alabama, Mississippi, Arkansas, Louisiana, Tennessee, North Carolina, South Carolina, Virginia, Missouri, Kentucky, West Virginia, Maryland.

nificant. The area of the country actually covered by the study comprehends somewhere in the neighborhood of 60 per cent of the total population of the United States.

Table II shows the number of counties in each of the population groups of North and South, and the *average annual wages* received by employees engaged in manufacturing in each of the population groups.[4] From this table one can readily see the lack of population concentration in the South. For example, no market in the South was as large as a million and only five markets were in the 500,000 to 1,000,000 category. The population spread of the North was much more even than in the South, although the bias is clearly toward the larger communities.

From this table it appears that in 1939 average annual earnings in manufacturing for the few larger southern markets compared favorably with similar communities in the North. The great discrepancy between North and South earnings appeared in the smaller markets, in which is situated the bulk of southern

TABLE II

Average Yearly Wages by Market Population—1939

(All manufacturing)

MARKET GROUP (POPULATION GROUP)	POPULATION RANGE (000 OMITTED)	NUMBER OF COUNTIES		AVERAGE ANNUAL WAGES ($)		SOUTHERN ANNUAL WAGES AS PERCENTAGE OF NORTHERN
		North	South	North	South	
1	1,000 and over	43	—	1,284	—	—
2	500 and under 1,000	9	5	1,244	1,284	103
3	250 and under 500	20	8	1,235	999	81
4	100 and under 250	36	20	1,163	859	74
5	40 and under 100	40	53	1,078	916	85

Source: *County Date Book, Supplement to Statistical Abstract of the United States—1947*, Bureau of the Census. All basic data were computed from this source.

employment. Forgetting the social or economic implications, for the moment, annual wage differentials appear generally to be associated with size of the community.

It should be noted that the smallest southern communities enjoyed an income relation to the North more favorable than the two next larger size southern communities, while in the largest southern communities the differential between North and South actually favored the South.

III

When the data were regrouped so that the effective groupings were determined by *numbers of establishments* in the market rather than by population in the market, the following resulted (see Table III).

This grouping is a rough attempt to get at the question of the relation between size of investment in the market and annual wages. It was realized that the

[4] No attempt was made to estimate earnings from other sources. In some areas, especially smaller markets, this might be of some significance.

number of establishments is not an entirely accurate index to size of investment. However, it is felt that the competition of many firms exercises an effect similar to the competition of a large capital supply. Furthermore, in a sample as large as the present one, the results of simply totaling the number of establishments probably approximates the relative size of investment.

Group 6 represents markets with the greatest number of establishments, i.e., over 1,000. In such markets, which again were few in the South and many in the North (5 as compared to 47), average annual earnings in the South were approximately the same as those in the North ($1273 as compared to $1285). This relationship also obtained in class 5 markets, i.e., those in which there were between 500 and 1,000 establishments, where average annual wages in the North ($1174) closely compared to those in the South ($1081). The greater differential was in the smaller groups, i.e., groups in which the concentrations of capital (number of establishments) tended to be relatively slight. The difference between northern and southern earnings did not shade off, but broke abruptly at class 4, i.e., 200–500 establishments (Table III).

TABLE III

Wages in All Manufacturing Grouped by Number of Manufacturing Establishments in the Market (1939)

GROUPS	NUMBER OF MANUFACTURING ESTABLISHMENTS	NUMBER OF MARKETS		AVERAGE ANNUAL WAGES ($)		SOUTHERN ANNUAL WAGE AS PERCENTAGE OF NORTHERN
		North	South	North	South	
1	Under 50	6	19	942	815	87
2	50– 99	20	28	1,112	871	78
3	100–199	36	19	1,160	909	78
4	200–499	30	8	1,182	894	76
5	500–999	9	5	1,174	1,081	92
6	1,000 and over	47	5	1,285	1,273	99

Here again it appears that concentration of capital as measured by number of establishments when great is associated with approximately equal earnings North and South, but when small is associated with higher earnings in the North. The relative spread between earnings North and South in the groups of relatively low numbers of establishments (groups 1–4 inclusive) is fairly constant (76 per cent to 78 per cent) except in the smallest class, where annual earnings in the South more closely reach the heights of those in the North (87 per cent).

IV

Labor productivity is difficult to measure. The economist is wont to speak of net value productivity of labor as the loss (in value) of production when a single homogeneous unit of labor is removed, *ceteris paribus*; or conversely, the gain in (value of) production when a single worker is added, *ceteris paribus*. This view of value productivity has great conceptual importance, but operationally it is of less significance, especially in a "real" situation.[5]

[5] See J. R. Hicks, *Theory of Wages*, pp. 234–235.

A somewhat rough-and-ready, but nevertheless useful, measure of productivity is to compare the value of materials entering the factory with their value upon leaving the factory. This is the usual "value added by manufacturing" concept. To apply this concept, the data were again rearranged, and divided into what we may call productivity groups. That is, the industries in the North and South were arranged in accordance with the value added by manufacture per employee. Six productivity groups were established. For ease in exposition, we shall refer to these groupings as productivity groupings.

Here a noticeable relation between productivity groups and average wages was discovered. The simple correlation between productivity and annual wages in the North yielded a coefficient of +.72. For the South the coefficient of correlation was +.66. This correlation measures the relation between annual earnings, which are the product of wage rates, continuity of employment over the year 1939, and overtime work on the one hand, and the value, in the market, of industry's production during the year. There was a tendency for annual earnings in the South for each productivity group to be lower than in the North, indicating that, in general, the distributive share of the product going to labor in the South was less than in the North.

The "Y intercept" for the South was $580 (per year); for the North it was $650. This means that, on the average, the average employee in the North starts off with an annual wage differential of $70 in his favor. The slopes of the two regressions tend to increase the differential, because for every $100 increase in productivity (value added by manufacturing) in the North, roughly $17 accrues to labor; in the South the corresponding figure is but $12.

The conclusion might be drawn that increasing labor-management (i.e., industrial) productivity in the South will probably tend to increase the slope of the regression (see Table IV), so that labor's share of the income will increase. The $70 "Y intercept" difference between North and South is roughly equal to the cost of living difference, which in 1939 according to the Bureau of Labor Statistics came to about 5 per cent. This "Y intercept" difference is the more or less static North-South annual earnings differential (in 1939).

Given the difference in the slopes of the regressions, it does appear possible that trade unions, wage legislation, increasing demand, and other *dei ex machina* can raise southern wages without adversely affecting employment. Important elements, however, are: (1) increasing southern capital-labor productivity; (2) increasing per capita investment in the South; and (3) increasing regularity of labor-capital employment in the South.

V

In order to ascertain the relationship between annual earnings and size of plant, the data were regrouped as shown in Table V.

The number of employees per establishment tends to indicate the capital investment per firm rather than the aggregate in any one market. Group 5 represents the largest average number of employees per establishment, 100 and over. Here the average annual wage in the North was $1342, whereas in the South it was but $1065. It should be noted that there is a constant increase in

TABLE IV

Average Yearly Wages by Productivity Groups

(All manufacturing, 1939)

PRODUCTIVITY GROUPS	VALUE ADDED BY MANUFACTURER	NUMBER OF MARKETS		AVERAGE ANNUAL WAGES ($)		SOUTHERN ANNUAL WAGES AS PERCENTAGE OF NORTHERN
		North	South	North	South	
1	Under $2,000	12	23	832	723	85
2	$2,000 and under $2,500	24	16	1,009	816	81
3	$2,500 and under $3,000	26	12	1,137	913	81
4	$3,000 and under $3,500	31	15	1,233	1,027	84
5	$3,500 and under $4,000	27	15	1,315	1,110	84
6	Over $4,000	30	5	1,374	1,258	92

Correlations of Productivity and Wages

NORTH—$Y_c = 6.5 + .1713\ X$ SOUTH—$Y_c = 5.8 + .1214\ X$

$\sigma y_s = 1.465$ $\sigma y_s = 1.79$

$r = .7161$ $r = .6598$

$r^2 = .5128$ $r^2 = .4354$

TABLE V

Average Annual Earnings by Average Number of Employees per Establishment

(All manufacturing, 1939)

GROUPS	NUMBER OF EMPLOYEES PER ESTABLISHMENT	NUMBER OF MARKETS		AVERAGE ANNUAL WAGES ($)	
		North	South	North	South
1	0 - 25	8	16	1,098	922
2	26 - 50	35	27	1,130	811
3	51 - 75	55	18	1,155	944
4	76 -100	23	10	1,217	939
5	100 or over	28	15	1,342	1,065

TABLE VI

Size of Market and Average Number of Employees per Establishment

(All manufacturing, 1939)

GROUPS	POPULATION RANGE (000 OMITTED)	AVERAGE NUMBER OF EMPLOYEES PER ESTABLISHMENT	
		North	South
1	1,000 and over	67	—
2	500 and under 1,000	69	62
3	250 and under 500	72	34
4	100 and under 250	76	65
5	40 and under 100	72	69

the average annual wage in the North as the average number of employees per establishment increases. This is not uniformly true in the southern markets; and the highest average annual wage of $1065, earned by employees in the largest size plants, was below the smallest northern group, which was $1098, where the average number of employees per establishment was less than 25.

In terms of population groups, the average number of employees per establishment is shown in Table VI.

Comparing Tables V and VI it appears that (1) annual earnings in the North tended to increase as the size of plant increased. This was not equally true in the South, although here the highest earnings were received by persons employed in the larger establishments; (2) the average size of establishments, in both the North and the South, were not closely related to the size of the communities in which the establishments were located; (3) there is a slight tendency in the North for larger plants, on the average, to be located in the smaller communities.

A correlation was computed between average annual wages on the one hand and productivity as used in this report, plus average number of workers per establishment. The data for the North revealed the high coefficient of multiple correlation of +.92. For the South the coefficient of multiple correlation was lower, but still was significant, +.73. An interesting statistical point with respect to these correlations is the smallness of the standard error of estimate. The standard error of estimate for the North regression was ±$83.66 per year. For the South the standard error of estimate was ±$167.74 per year.

VI

The authors feel that the following tentative conclusions can be offered with respect to the North-South annual earnings differential.

First, the differential is in part the size of the city differential, so that the South with its many small towns tends to have lower annual earnings than the North, largely because small towns generally tend to have lower wages than larger towns. This is not a southern phenomenon. The differential is in part related to the quantity of investment, since there seems to be a tendency for wages to be higher in communities where the capital fund is greater, and in less magnitude, wages tend to be higher in larger establishments as compared to smaller establishments. Since the South has not the great investment of the North, wages in the South tend to be lower than in the North. This, incidentally, fits in exactly with the arguments of economic theory.

Second, annual wages in manufacturing are related to value added by manufacture. The greater the value added by manufacture the more noticeable the tendency for average annual earnings to be higher. In the South, however, a slightly smaller share of productivity increases are paid out in wages than in the North.

In general it appears that annual earnings in the North and South are the product of two factors: (1) size of the capital investment in the market, and (2) productivity of the factory employing the particular employee.

THE STATUS OF STAGNATION THEORY—PART I*

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Much has happened and much has been written since *The General Theory* of Lord Keynes was published in 1935.[1] Although not all of the literature of the past dozen years has been oriented to the Keynesian problems and the Keynesian approach, it is surely no exaggeration to state that Keynes' work has been the overwhelmingly dominant influence in economic writings. This being the case it is important that an occasional stock-taking be indulged to discover the degree to which the "new doctrines" are holding out against severe and able critics, and the extent to which equally competent proponents have found it necessary and possible to modify the Keynesian theses to meet the attacks upon them. It is the purpose of this paper to inquire into the current status of one of these theses—the secular stagnation hypothesis.

I

It is only natural, perhaps, that the initial promulgation of a significant idea would touch off a wave of bitter opposition. Scarcely less natural is the expectation that much of this opposition would in its earliest stages reflect outright misunderstanding of the nature of the thing opposed. Part of this misunderstanding normally stems from the emotional biases aroused by the new idea, and part of it derives from the inadequacy with which new ideas are frequently expressed. Secular stagnation has been especially confused by the first type of misunderstanding because it represents a serious breach of both the lay belief in unlimited expansion for America,[2] and the professional economist's trust in classical economics.[3] In addition, secular stagnation seems to have suffered more than normally from the second kind of misunderstanding, for the originator of the theory only mentioned it in connection with other problems more important to him at the moment. If Lord Keynes had later taken pains to expand his ideas on this subject the result might have been much different. For understandable reasons, however, he did not,[4] and consequently the expansion of the idea was undertaken by others, primarily Professor Hansen.[5] Although this task was

* The writer wishes to express appreciation to Mr. J. W. Clark for assistance in gathering bibliographical data for this analysis. Part II will appear in a subsequent issue.

[1] *The General Theory of Employment, Interest, and Money.*

[2] G. Terborgh's *The Bogey of Economic Maturity* seems to reflect this attitude, although the author could not be classified as a layman.

[3] A good example of this is Swanson and Schmidt, *Economic Stagnation or Progress.*

[4] The storm of controversy over stagnation did not commence until about 1938, and after that date until his death Professor Keynes was fully absorbed with England's war and postwar problems.

[5] *Full Recovery or Stagnation;* and *Fiscal Policy and Business Cycles.*

approached by Professor Hansen in a most capable fashion there is no good substitute for an explanation of an idea by the originator himself.

It is not necessary to decide here the extent to which each of these sources actually contributed to the misunderstanding that has characterized the stagnation debate. The important fact is that by now the most serious misunderstandings no longer confuse basic issues, and that the scholarship of the discussion has proportionately improved. Since the object of this investigation is to determine the status of the theory of stagnation it is only necessary to take brief note of the misdirected effort that developed and its consequences.

It should occasion no surprise that most of the waste motion associated with the controversy over stagnation was (and is) related to the basic innovation of stagnation theory, i.e., the "psychological law" of Lord Keynes. According to this law the richer a nation becomes the greater is the volume of savings for which it must find investment outlets. There is, of course, every reason why economists should have subjected this idea to the most searching examination. But it is a fact that economists did not approach this new concept on the basis of thorough study. Instead they consistently treated it in three other ways, all of them much less scientific. Specifically, they have dogmatically denied the existence of the law, they have misinterpreted it, and they have ignored it. Each of these approaches created difficulties for the advance of scholarship in this field that might well repay analysis.

First, the dogmatic denial of the psychological law had the effect of stripping stagnation of all that differentiates it from economic maturity. A surprisingly large proportion of early attacks on stagnation seem to have been predicated on the assumption of identity between these two concepts, and as a result two serious errors were committed. On the one hand, it was insisted that "vanishing investment opportunity" would not be a problem even if it existed because income could then be transferred from the investment to the consumption sector of the economy.[6] On the other hand, it was urged that stagnation could not be present because there are undoubtedly more investment opportunities than can be exploited by the use of replacement capital.[7]

The first of these arguments is obviously a confusion with maturity because a mature economy would behave in exactly this fashion. But it constitutes a technical error because it is precisely this shift from the investment to the consumption sector that the stagnation theory holds is not possible—or at least not to whatever extent may happen to be required. The second approach can be identified with the idea of economic maturity with equal readiness, for a zero net capital formation is, after all, the principal characteristic of maturity. This, too, is an error because stagnation implies only that the propensity to invest is smaller

[6] See W. I. King, "Are We Suffering From Economic Maturity?" *Journal of Political Economy*, Oct. 1939.

[7] See W. Fellner, "The Technological Argument of the Stagnation Thesis," *Quarterly Journal of Economics*, Aug. 1941. It should be emphasized that others have used Professor Fellner's data for much more extreme purposes than the writer intended. See, e.g., Swanson and Schmidt, *op. cit.*

than the propensity to save, and could therefore be fully consistent with a large volume of net capital formation.

Second, the misinterpretation of the psychological law has been an equally serious obstacle to the satisfactory investigation of the real issues involved in the stagnation theses. This result develops not so much through outright error from a technical point of view as from the diversion of attention and energy to the disproving of propositions that stagnationists have no need or desire to defend. Until recently the law was usually attacked with statistical data proving that it is sheer nonsense to say that as national income increases the proportion of income saved increases.[8] Actually the law as formulated by Lord Keynes does not take this position at all, stating rather that the absolute amount of savings will increase.[9] And, furthermore, the data that has been presented to prove that the psychological law is an absuridity actually does prove that the law did operate from 1869 to 1929—the statistics showing that the percentage of national income going to capital formation has remained roughly constant over this period.[10] A constant percentage of a national income rising rapidly as did that of the United States during this time would clearly yield an increasing absolute amount of savings.

Third, a rather common practice of ignoring the psychological law created a further difficulty in the way of objective analysis. The result of this practice was that two types of mistakes in thinking and presentation were made. First, the idea of stagnation was easily explained away by attributing the failure of investment to sabotage by government. With this approach the symptoms of stagnation are the logical consequence of the "obstacles to investment" implicit in the policies of the New Deal, and thus not related to any tendency for investment opportunities to dry up per se.[11] These factors may, of course, be important, and on this point more will be said later. But the fact remains that these obstacles could not produce stagnation symptoms apart from the psychological law which postulates that consumption and investment are not reciprocally motivated.[12]

But second, and probably more significant, the stagnation problem was easily limited to the immediate period. Opponents of stagnation typically assumed that their responsibility ended with demonstrations proving that the economy could not at this time be suffering from stagnation because of the specific availability of a sufficient opportunity for investment to offset expectable savings.

[8] Terborgh, *op. cit.*, chap. X.

[9] Keynes, *op. cit.*, pp. 31 and 96.

[10] S. Kuznets, *National Product Since 1869.*

[11] See H. S. Ellis, "Monetary Policy and Investment," *American Economic Review*, March 1940.

[12] To avoid confusion it should be pointed out here that the psychological law of Lord Keynes actually takes a more extreme view toward this lack of reciprocal motivation than is required for the stagnation hypothesis. Thus the belief that people will do some saving regardless of investment opportunities is all that is essential to stagnation theory. The purposes served here by limiting discussion to the law itself are: (1) to focus attention on the relevant issues more squarely; and (2) to keep the analysis coextensive with the actual controversy on the subject.

But when the psychological law is permitted to enter the picture this relief—even if conclusively proved—affords only a temporary respite, for the specter of stagnation as a possibility for the future still persists. Thus the typical opponent of the idea of stagnation can hope at the most for a mere shifting of the time frame of reference unless the usual approach ignoring the Keynsian law is changed. Virtually the only writer who has taken specific cognizance of the fact that the threat of stagnation can be attacked squarely and definitively only through the psychological law is Professor Schumpeter.[13]

Much more could be said on all of these points. To say more, however, would result in an overemphasis upon the shadow-boxing of the past and obscure the fact that the debate has by now ascended to a much higher level. Turning, therefore, from the status of the stagnation debate, attention can be directed to the status of the theory itself. For this purpose two varieties of the theory may conveniently be distinguished. The first is "undated" theory, or the thesis that capitalism is vulnerable to stagnation at some time although not necessarily in the present or the immediate future. The second is "dated" theory, or the view that capitalism is already beginning to feel the effects of stagnation. Since the former is the larger problem—the second depending for its validity upon the first—its status in the literature will be examined first.

"Undated" stagnation theory may be divided into two parts. It rests, first, upon the major propositions of economic maturity, i.e., a secular decline in the marginal efficiency of capital and limits to the fall in the rate of interest. Second, it depends upon the Keynesian psychological law. In brief it can be said that the maturity propositions are generally accepted as valid, while the psychological law has received so little attention that it can scarcely be considered as having any status at all. However, a few comments on each of these summary propositions are essential background for the fuller discussion of "dated" stagnation theory to follow.

The first of the maturity propositions—secular diminishing returns in the employment of capital—easily raises the most problems, these rather fully posed in the following quotation from Professor Frank Knight: "The heart of a correct theory of interest is . . . the fact . . . that the investment market is capable of absorbing savings at the maximum rate at which they are forthcoming, with only a very gradual decline of the rate of return through time, other things equal, and the further fact that changes which do occur in the 'other things' . . . actually prevent any general decline."[14]

Professor Hayek has presented some data that appear to provide support for Professor Knight's thesis. Professor Hayek's statement is that "an increase in the current output of capital goods will frequently have the effect not of lowering but of raising the future demand for investible funds.[15] As a first approximation

[13] *Capitalism, Socialism, and Democracy*, 2nd ed.

[14] "Capital, Time, and the Interest Rate," *Economica*, Aug. 1934, p. 285. This view has also been advanced by Professors Cassel and Simons.

[15] "Investment that Raises the Demand for Capital," *Review of Economic Statistics*, Nov. 1937, p. 174.

this view seems to advance a notion contrary to that commonly accepted. In terms of secular stagnation theory, however, there is an exceedingly wide range of interpretations that can be placed upon it. On the one hand, it can be—and has been[16]—turned directly to the purposes of antistagnation in the sense of disproving the tendency for returns to diminish as accumulation progresses. At the other extreme, the relationships outlined by Professor Hayek can be taken to suggest merely important exceptional instances of reality that do not—interesting and constructive though they are—deny the validity of generally accepted truths. It is submitted here that a careful reading of the argument of Professor Hayek is all that is necessary to controvert the notion that it was his intention to take a stand against net diminishing returns for capital.

This, of course, is too vast a subject to analyze thoroughly here. Three observations must suffice. First, Professor Wright has advanced a number of convincing reasons for calling the extreme of this view into question.[17] Second, Professor Knight stands virtually alone in holding to this thesis. Third, the "other things" to which Professor Knight refers are in large part technological factors, and to start the discussion with this proposition is simply to beg the entire question of "vanishing investment opportunity" as formulated by "dated" stagnation doctrine. The only supportable position to take regarding Professor Knight's proposition at this stage in the debate seems to be that this unorthodox approach is highly conjectural and as yet unproved. Certainly the opposite view is prima facie the stronger for all who believe capitalism will not succeed in converting many economic goods into free goods.

With respect to the second maturity proposition—limits to the secular decline in the rate of interest—the actual controversy has been keener but the point at issue has no significance for "undated" stagnation theory. Lord Keynes presents the view that "a properly run community . . . ought to be able to bring down the marginal efficiency of capital in equilibrium approximately to zero within a single generation."[18] The opposing view is typified by Professor Haberler who finds compelling reasons for believing that the minimum rate "should be a rate which is just sufficient to induce the community as a whole to refrain from consuming its capital."[19] For present purposes it is clearly unnecessary to make a choice between these two views. Both groups are convinced that there is a minimum below which the interest rate cannot fall, although, of course, a longer period of time would be required if the rate must be pushed down to a zero minimum.

On the basis of the above comments it seems fair to say that at the moment the probability in favor of the validity of the maturity portions of "undated" stagnation far exceeds the probability in favor of their invalidity. Therefore, even more would seem to depend on the validity of the psychological law than would otherwise be the case. This being true it is all the more surprising that little

[16] Swanson and Schmidt, *op. cit.*, pp. 62 ff.

[17] "Professor Knight on Limits to the Use of Capital," *Quarterly Journal of Economics*, May 1944.

[18] P. 220.

[19] *Op. cit.*, p. 127.

real attention has been given to analysis of this issue. Although most of this neglect is no doubt due to the fact that the law has normally been dogmatically denied, misinterpreted, or ignored, it has been no less unfortunate.

As stated earlier the only critical attack on the psychological law has come from Professor Schumpeter. The following brief comments will indicate the status of this part of the debate. First, the statistical data thus far analyzed do support the law.[20] It should be emphasized, however, that evidence pertaining to historical development is not conclusive, for the historical situation did not involve significant investment difficulties. The question of whether or not the law would operate in a situation characterized by investment difficulty is an issue that cannot be solved in this manner.

This problem leads directly into a second. It has been argued that the so-called psychological law is merely a tendency that will in practice be fully and automatically counteracted by other forces. One of the forces mentioned in this connection is the rate of interest.[21] However, the fact that economists seem to be broadening their belief that the rate of interest is too institutionalized to perform such a delicate task would indicate that this thesis has not been adequately established.[22] Another force that some think may assist in this process is the evolution of higher living standards, this view using as its automatic element the fact that individuals will consume if they cannot invest.[23] Against this view the argument that savers and investors are not identical (security saving, bank credit, and large-scale business organization) has made a telling impression.

In conclusion, these comments are not at all meant to disprove the arguments against the psychological law. By way of summary, however, with respect to its status, the following statements seem fully supportable. First, in the emphasis of the Keynesians upon the propensity to hoard is reflected their deep absorption with the decade of the 30's. Consequently, this emphasis is probably overdrawn as a secular phenomenon. Second, the psychological law—although a vital basing point for stagnation doctrine—has received too little critical attention to be considered either accepted or rejected. Third, the legitimate criticisms that have been offered leave so many questions unanswered that a concentration upon this problem must be considered a first order of business by those who would try to reach an objective answer to this perplexing problem.[24]

[20] Kuznets, *op. cit.* See also M. Ezekiel, "Statistical Investigation of Saving, Consumption, and Investment," *American Economic Review*, March 1942.

[21] C. Warburton, "Volume of Savings, Quantity of Money, and Business Instability," *Journal of Political Economy*, June 1947.

[22] H. F. Lutz, "The Interest Rate and Investment in a Dynamic Economy," *American Economic Review*, Dec. 1945.

[23] Schumpeter, *op. cit.*, pp. 394 ff.

[24] These sketchy notes on the psychological law are based on an intensive investigation of this subject that the writer is now working to complete. The full investigation has been carried sufficiently far for the writer to feel justified in raising these grave doubts on the basis of what would otherwise be considered inadequate documentation and analysis.

II

Since by far the major part of the discussion concerning stagnation has centered on the "dated" version of the theory, it is appropriate to subject this approach to a somewhat more detailed review and analysis. In the main this part of the presentation is in specific terms, and therefore a few general observations at the outset are required in the interest of perspective.

First, this part of the debate has contained its share of arguments that simply do not contribute to the subject at all. In this category would be placed the stagnation emphasis on financing through replacement reserves, and the anti-stagnationist inference (though now weakening) that extensive factors are unimportant for capital formation. Happily the controversy has been constructive as to most of these problems so that there is today much more agreement on them than at any time previously.

Second, the argument has also been confused by the atomistic treatment of the problem that has prevailed. Opponents of stagnation have typically followed the practice of holding stagnation factors—one by one—to the X-ray of searching analysis and discarding each as too small to produce the result for which a cause is sought. This technique is highly favorable to the antistagnation thesis, and it is not readily understandable why the proponents of the theory have permitted this technique to prevail. It is as though by laughing at each separate grain of sand one could prove that the beach is impossible.

Third, arguments have figured in the discussion, which, while not worthless in themselves, depend for their validity on the psychological law. For example, the antistagnationist contention that the decline in the rate of population growth is caused by a mass desire to consume and that consequently that factor cannot be a contribution to stagnation reduces to a dogmatic denial of the existence of any psychological law such as is postulated in stagnationist writing. Such arguments cannot be conclusive apart from the status of the debate on the law itself. And this, therefore, serves only to emphasize the earlier observation that much remains to be done on this point.

Fourth, still other arguments reduce to mere conjecture on the potential technology available for the future, it being generally granted that secular diminishing returns for capital are unavoidable. It is at this point that the debate most fails to be scholarly—neither side able to marshal anything but opinion in support.[25] The controversy over "great new industries" is a case in point. Thus, while it is now surely settled that extensive factors do contribute to capital formation, it cannot be demonstrated that the intensive factors are not in a position to offset fully any tendency for the former to decline. This constitutes a major hazard for the debate from this point forward, the danger being that it will proceed on prejudice, rather than concentrate on phases with respect to which real conclusions are possible.

[25] As a consequence of this situation these arguments tend to be little more than vehicles for the expression of belief in capitalist automaticity or the reverse. These value attitudes are, of course, irrelevant to the main issues but are important as an indication of the difficulty of objectivity in connection with this problem.

Finally, those antagonistic to the idea of stagnation have been outstandingly successful in limiting the debate to the objective factors influencing investment. In this situation, again, it is not easily understandable why stagnationists have permitted this narrowing of the ground for debate, particularly when such a narrowing loses to them one of their most potent weapons. However, the subjective factors influencing investment are so important that considerable attention will be devoted to them after this discussion of "dated" stagnation has been concluded.

With these observations as background, an outline of the pros and cons relative to the stagnation controversy becomes appropriate. The first particular point of disagreement is the influence of population growth on capital formation. The attack on the stagnation thesis that a decline in the rate of growth has had unfavorable consequences for investment opportunity has taken several forms. First, it is argued that countries with a high rate of population growth have not increased their per capita production more rapidly than those with slow population growth.[26] This however, has nothing to say on the real point in question, i.e., whether or not greater investment opportunity was present in the former.[27] Second, it is stated that population growth is an extensive investment factor and that intensive factors can absorb all available savings without difficulty.[28] This is true, of course, only if one accepts as proved the antistagnation technological arguments commented on below. Third, the argument is advanced that the declining rate of growth in population will result in a comparable decrease in saving to offset whatever decline in investment opportunity occurs. This result follows because (1) savings are contingent upon investment decisions,[29] and (2) population growth is declining specifically in order that consumption may be increased.[30] The first of these contentions reduces to the psychological law discussed above. The second does not follow. If a family decides on three children rather than four in order to have more income available for current consumption it will not necessarily result that the full amount of the saving will be so spent. This is a particularly important example of economic indivisibility and such choices are rarely made on the assumed either-or basis. (This, too, ultimately reduces to the psychological law.) Fourth, it is stated that the decline in population growth could not cause stagnation at this time because it is by now a 70-year-old phenomenon.[31] Against this view it is stated (1) that the absolute decline in population growth did not set in until after World War I,[32] and (2) that

[26] Terborgh, *op. cit.*, pp. 40 and 44.

[27] It is implicitly conceded that population growth is important for capital formation in the advancement of other arguments to prove that declining growth will not matter. In fact Dr. Terborgh himself actually estimates that one-third of net capital formation in the last half of the nineteenth century, a figure even higher than Dr. Hansen's estimate, can be associated with this cause.

[28] Terborgh, *op. cit.*, p. 44.

[29] *Ibid.*, pp. 56 ff.

[30] Schumpeter, *op. cit.*, p. 114.

[31] Terborgh, *op. cit.*, p. 50.

[32] Hansen, *Economic Policy and Full Employment*, Appendix B.

it is still possible that this factor simply did not combine with other factors with sufficient force to produce the result indicated until recently.[33]

Another point of disagreement is the influence of the development of new lands. By this term is meant not only the external frontier but the internal as well. In opposition to the stagnation argument that investment opportunity has declined because of the disappearance of new lands several points are made. First, it is held that the frontier at home disappeared 50 years ago and could therefore not be a cause of trouble now.[34] The obvious answers to this view are identical with those to the same argument in connection with population: (1) economic development of the frontier is not the same as westward migration, and it did not stop with the cessation of migration;[35] (2) this factor is only one of several that must combine to produce the phenomenon in question.[36] Second, the argument has been advanced that the frontier was responsible after all for a very small part of total capital formation.[37] This argument, however, neglects both the cumulative effects of small factors, and the contribution of frontier development to capital formation in other than frontier regions.[38] Third, much is made of the fact that even if dire results are to be expected from the passing of the internal frontier much investment opportunity elsewhere is crying for exploitation.[39] And against typical stagnationist pessimism emanating from between-wars developments in the international economy antistagnationists insist that obstacles to adequate foreign investment "ultimately reduce very largely to an intensely hostile ideological climate."[40] To the extent that this last is intended to minimize the obstacles to international capital movements it is obviously inappropriate. On the other hand, if its intention is to remove the investment problem from the realm of stagnation it is a more pertinent argument. It must, however, be conceded that the failure of international investment to take up the necessary slack would pose no full-employment problem apart from the Keynesian psychological law.

The next point of contention is the stagnationist view that technological development at this stage in the evolution of capitalism is unable to provide offsets for the volume of savings forthcoming in the absence of strong extensive invest opportunities. This argument takes two forms, maintaining first that there are in sight no "great new industries" to absorb investment, and second that technology is becoming increasingly capital-saving rather than capital-creating. Several general comments will serve to demonstrate the status of this part of the controversy.

First, it is profoundly true that the discussion in this field is accurately char-

[33] B. Higgins, "The Doctrine of Economic Maturity," *American Economic Review*, March 1946, p. 128.

[34] Terborgh, *op. cit.*, p. 65.

[35] Hansen, *Economic Policy*, Appendix B.

[36] Higgins, *op. cit.*, p. 138.

[37] Terborgh, *op. cit.*, pp. 67 ff.

[38] Hansen, *Economic Policy*, Appendix B.

[39] D. M. Wright, *The Economics of Disturbance*, p. 88.

[40] *Loc. cit.*

acterized by Dr. Terborgh's well-chosen phrase "The Great Guessing Game."[41] It is a strong argument that in 1830 no one could have dreamed of the investment consequences of the railroad. On the other hand, it must be acknowledged that there must be a beginning for anything that is going to develop at all. Most of the argument in this connection agrees that the technological dearth has been grossly exaggerated, but there is also much responsible opinion holding to the thesis that our beginning may still very well be now.[42] It is scarcely necessary to point out that there has been much less of this last approach since the imagination of the world was recently staggered by the embryo appearance of atomic energy.

Second, there is rather a preponderance of opinion by now that a multitude of smaller innovations can make up for the absence of "great new industries."[43] On the other hand, the argument of antistagnationists that "great new industries" have comprised on the average only 16 per cent of total capital formation[44] is of the emotional variety rather than intellectually convincing. The percentage of net new capital would undoubtedly be much larger and even 16 per cent "is quite large enough to cause very great maladjustment."[45]

Third, the thesis that much of the difficulty stems from the fact that innovations are increasingly capital-saving has reached what might well be termed an impasse. Dr. Terborgh has presented data showing that investment per worker and per dollar of output are exhibiting no tendency to decline.[46] On the other hand, according to Professor Higgins: "The Kuznets data show a rising ratio of output of capital goods to output of final products (excluding construction) from 1869 to the first World War and then a steep and steady decline."[47] This type of difference of opinion is one that should pass quickly among earnest students anxious to discover the truth. But it is important to observe that this possibility, in common with many others, has no unfavorable employment consequences in the absence of the Keynesian psychological law.

Somewhat more important than this simple difference of opinion are the conclusions reached by Professor Brown.[48] As a result of his study of invention along the lines indicated he concluded that capital-saving and labor-saving innovations stand on an identical footing with respect to their employment consequences. This result, however, needs serious qualification. First, there are admitted transitional difficulties (although this is equally true of both cases) that will react unfavorably on the economy in the presence of a weak propensity to

[41] *Op. cit.*, p. 194.

[42] Much of this opinion rests on a view that is not identical with the stagnation thesis. See, e.g., J. A. Schumpeter, *Business Cycles*, pp. 1030 ff.

[43] J. W. Angell, *Investment and Business Cycles*, pp. 103 ff.

[44] Terborgh, *op. cit.*, p. 88.

[45] D. M. Wright, " 'The Great Guessing Game': Terborgh Versus Hansen," *Review of Economic Statistics*, Feb. 1946, p. 19.

[46] *Op. cit.*, pp. 94 ff.

[47] Higgins, *op. cit.*, p. 139.

[48] " 'Labor-Saving' and 'Capital-Saving' Innovations," *Southern Economic Journal*, Oct. 1946.

consume. Second, Professor Brown's argument does not prove that it would not take more capital-saving innovations to absorb a given amount of savings. This argument reduces ultimately to the problem of the potential rate of innovation.

In addition, despite these conclusions with respect to capital-saving inventions, one related aspect is also critically important. It seems undeniably true that the more advanced the capital equipment of a community the more does new technology tend to destroy existing capital as it becomes new investment.[49] This has consequences pertinent to this discussion in several directions. First, it results that a much greater gross investment is required to produce the same net investment. This, of course, is unfavorable for the stagnation theory or at least it would be were it not for the following consideration. Second, it means that the annual product of capital must be expected to be greater before investment will be profitable since to normal depreciation there must be added a larger obsolescence factor. This result is highly favorable to the stagnation thesis. And third, it contributes some little bit to the development of monopolistic practices that interfere with normal market processes. This consequence is neutral from the point of view of stagnation theory, although many antistagnationists insist that this interference with the market does produce exactly those things most feared in stagnation writing.[50] All in all it seems fair to say that this fact will contribute to, much more than detract from, the thesis of stagnation.

Another strongly contested point is the stagnationist emphasis upon the financing of industry through replacement reserves. On this question there can at this stage be little doubt on two points: first, that this possibility has been elevated far higher than its importance warrants; and second, that much that has been written concerning it has been wasted effort. It is now generally recognized that the contention that business can finance itself without appeal to outside sources is a gross exaggeration.[51] On the other hand, it does not strengthen this case to belittle the magnitude of funds that are made available through depreciation accounting, or to indulge in complicated formulae to prove that capital goods are replaced before they are taken out of use,[52] or to emphasize that depreciation from railroads will not finance the newer automobile industry.[53] Actually the power of this argument—and hence the logical point for attack—lies in the effect of depreciation policies on the propensity to consume. The substance that this aspect of stagnation theory contains is that the propensity to consume with respect to such funds is much lower than if the same funds were distributed to individuals. It will readily be granted that this latter procedure would be extremely poor business practice and that there is no likelihood that the situation will be altered in the near future. But as an institutional factor helping

[49] H. R. Smith, "Random Reflections on a Mature Economy," *Southwestern Social Science Quarterly*, Dec. 1945, pp. 20 ff.

[50] See W. Fellner, *op. cit.*

[51] Terborgh, *op. cit.*, chap. VIII. However, a careful reading of stagnation writing will easily demonstrate that this extreme statement referred only to the decade of the 30's and was intended to be illustrative only.

[52] *Ibid.*, chap. VII.

[53] Schumpeter, *Capitalism, Socialism, and Democracy*, p. 119.

to explain the failure of income increments to become consumption increments—and simultaneously closing investment opportunities to private savings—it has a wide significance that is yet to be destroyed.[54]

On the basis of this review of the stagnation debate as background, one further step can now be taken. The principal shortcoming of this controversy is obviously its nonintegrated nature. In order to place the above elements of stagnation theory in a more intelligible context, a beginning will next be made toward weaving the diverse strands of thought into a single economic fabric.

1. A nation increases its capital equipment through saving and investment. The motivation for investment is the prospect of gain for those who take the responsibility for committing liquid funds to more fixed forms. The selection of investment outlets is a particularly important part of the entrepreneurial function, and decisions in this field are made on the same principles as other important business decisions.

2. It is true that innovations spread throughout an economy over a period of time rather than simultaneously. This happens because of a shortage of capital, the tendency to exploit the most profitable possibilities first, and numerous accidental factors such as discontinuities in entrepreneurial vision. It is essentially this time interval that lends practical significance to the distinction between intensive and extensive investment factors.

3. There are important circumstances under which the two sets of factors are competitive. In a situation in which technological progress is rapid, technological improvements will be available before the basic innovation has spread far from an extensive point of view. In some respects this is economical for the nation as a whole, reducing the obsolescence factor, and in other respects the reverse is true.

4. There are important circumstances also under which these factors are simply complementary. In a situation in which technology is proceeding slowly, given innovations will spread farther before being interrupted by greater development. And this result, just as the one immediately preceding, follows from the capitalistic behavior of investors acting in an entrepreneurial capacity and seeking to maximize their net incomes.

5. Unfortunately, perhaps, extensive investment in stagnation theory has been too closely associated with new people and new lands rather than number of people and quantity of land. Emphasis upon the new is simply the extreme example of extensive outlet because a new machine where one did not exist before will absorb more net savings than a new machine where an old one must be scrapped in the process.

6. The above observation needs one qualification. The mere increase in numbers will not contribute to investment opportunity in the absence of a re-

[54] Moreover, net savings of corporations must be put in the same category with depreciation funds from this point of view. Both of these phenomena, however, prove nothing in themselves but both do relate ultimately to the psychological law. Cf. M. Abramovitz, "Savings and Investment: Profits *vs.* Prosperity," *American Economic Review*, June 1942, Supplement.

distribution of income and perhaps a diminished propensity to save. This qualification is minor, however, because capitalist expansion has been characterized by a population growth in conjunction with the availability of new resources.

7. It is generally agreed that technology is not continuous or that there are waves of innovation activity followed by periods of lesser activity. In these less dynamic periods extensive capital formation serves the important function of sustaining the demand for capital until new innovation is again available. Extensive fields for development are particularly, though not exclusively, important during these periods.

8. It follows that a nation losing a substantial portion of its extensive component is thereby rendered more dependent upon new technology for a high rate of capital formation. If this greater dependence coincides with a secular or cyclical lull in technological advance the inevitable consequence is a diminution of capital formation.

9. In the event of such a coincidence the maintenance of national income and full employment hinges upon the propensity to save. If it falls in proportion to the decline in investment opportunity, full employment can prevail. If not—which may well be the case if it is in practice related to other things than investment opportunity as such—then economic equilibration will be forced to take the form of a fall in income below the full employment level.

10. The preceding propositions seem to leave a choice as to cyclical stagnation or secular stagnation (if, of course, either is conceded). However, in view of the wide agreement on the necessity for a secular decline in the marginal efficiency of capital, cyclical stagnation could only be a first major step toward secular stagnation. This result would, of course, be mitigated if the long-period propensity to consume adjusted itself in a way that the short-period propensity is apparently unable to do. It would still happen that there are periods of privately generated full employment ahead even apart from the probable postwar boom. In addition, the appearance of atomic energy on the horizon further improves this outlook.

11. All of this seems to be a bias in the economic system that appears only at a certain stage in capitalist development. Actually it has always been true that consumption has not been geared to investment opportunities in any direct way. Instead the failure of savings to be equal to investment opportunity was adjusted to by the simple fact that entrepreneurs simply selected the most profitable of the available possibilities and postponed the remainder. Actually, also, a mechanism was devised to hasten the process along. Through credit creation the system was able to accelerate the capital formation process by increasing investment through forced saving.

12. This bias, it will be noted, is simply the reverse of the stagnationist bias in which saving is greater than investment opportunity, not less. The reason this problem is so much more important than the earlier one is that it results in a positive economic "illth" while the former did not.

It is submitted that these propositions represent in brief the integrated stag-

nation theory. It is also submitted that they can be subscribed to by virtually everyone, whether of stagnationist leanings or not.[55] Only when two major assumptions are positively made does stagnation actually flow from this theory. The first and most basic assumption is that saving and investment are not uniquely correlated.[56] The second is that we are currently witnessing a lull in innovation activity.[57] In view of the large element of conjecture in this second assumption, it will be seen that once again all roads lead directly back to the Keynesian psychological law.

[55] It is true, however, that some of them have only recently been formulated in such a way as to be acceptable to both sides of the controversy.

[56] Acceptance of this assumption only commits one to "undated" stagnation theory and does not at all involve a judgment as to the present situation.

[57] Acceptance of this proposition and not the first commits one to the idea of maturity (not stagnation) as describing the present situation. Acceptance of both assumptions is acceptance of "dated" stagnation in some form.

NOTE ON THE KINKY OLIGOPOLY DEMAND CURVE

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In a recent article[1] Professor George J. Stigler has discussed the theory of the kinky oligopoly demand curve and attempted to test empirically whether or not such curves really exist. His empirical evidence is divided into two parts: (1) histories of the prices quoted by the different firms in certain oligopolistic industries, intended to show whether it is a valid assumption that businessmen expect their competitors to follow them on price cuts but not on increases, and (2) studies of the degree of price flexibility in 19 oligopolistic industries, intended to show whether the facts conform to certain conclusions regarding price rigidity which he holds are implied by kinky demand curve theory.

I shall devote my attention primarily to part (1) of his empirical work. Here he inquires whether actual price behavior has corresponded to the pattern of expectations assumed by kinky demand theory: price increases are not followed by competitiors, but decreases are. He finds, in most cases, that both increases and decreases are nearly simultaneous, though some decreases may lag. Thus, in these industries, "there is little historical basis for a firm to believe that price increases will not be matched by rivals and that price decreases will be matched."[2]

Attempts at empirical verification of the existence or nonexistence of the kinked demand curve are valuable, but in this case there has not been a proper test of Sweezy's version of the theory. Moreover, as we shall see, the existence of entrepreneurial belief in a kink is not incompatible with a considerable amount of industry-wide price variation, which Stigler's empirical studies of prices by firms revealed as common. However, the complications that arise in applying the theory to groups of several firms suggest that it suffers from severe limitations as an analytical device.

The direct approach to an inductive study of businessmen's expectations is to ask the businessman about them, along the lines indicated by George Katona.[3] When R. L. Hall and C. J. Hitch did so, "a majority of the entrepreneurs believed that price cuts would be matched and price increases would not be matched by rivals. . . ."[4] It is not a satisfactory substitute for such inquiries to assume that businessmen base their expectations on their experience and then take the observed historical price pattern of an industry as the measure of that experience. In the first place, business expectations are not always correct; they do not always correspond with reality. Second, even if we assume that expectations are pre-

[1] "The Kinky Oligopoly Demand Curve and Rigid Prices," *The Journal of Political Economy*, LV: 432–49, 1947.

[2] *Ibid.*, p. 441.

[3] See *Price Control and Business.*

[4] Stigler, *op. cit.*, p. 433, n. 7, citing Hall and Hitch, "Price Theory and Business Behavior," *Oxford Economic Papers*, No. 2, May 1939, p. 21, Tables 3 and 4.

dominantly correct, they need not be based solely on knowledge of past price behavior, the only factor Stigler considers. Finally, whether rational or irrational, businessmen's fears of certain consequences may be strong enough to motivate action to avoid them, with the result that the situation feared rarely or never arises.

Since expectations may not correspond to reality, the kinked demand curve is preferably viewed as subjective (expressing expectations), following Sweezy rather than Stigler.[5] This interpretation clarifies the theory by forcing explicit consideration of the degree to which business expectations do correspond with reality. Expectations were apparently incorrect in Stigler's two instances of "unsuccessful" price increases in the cigarette industry and one of an unsuccessful price decrease in the potash industry.[6] However, it may be noted that the assumptions of the kinked oligopoly demand curve were not discredited by experience in the cigarette industry, or by expectations in the potash industry.

In considering the relation between experience and expectations, it must also be remembered that even an occasional instance in which one's rivals fail to follow one's increases or do follow one's decreases may be so discomfiting to the businessman as to assume a weight out of all proportion to its frequency in his evaluation of his experience. The fear of loss may be a more powerful motivation than the hope of profit.

Since it is not always possible to inquire directly into entrepreneurial expectations, it may be useful, as Stigler does, to adopt the indirect approach of comparing the results predicted by the theory with observed behavior. However, if the test is to have relevance to Sweezy's version of kinky demand theory, it is essential that the interpretation of the theory be in sympathy with his.

On such an interpretation, much of the price behavior reported by Stigler is consistent with the theory. Taking into account the fact that the businessman's experience provides him with information the economist on the outside may lack, the price behavior reported would not generally require a businessman to revise his expectations if they are as the theory assumes. The businessman will know whether the influences or maladjustments leading him to consider a price change affect only his own firm or affect all firms,[7] to take the extreme cases. Without this information it is impossible to tell whether a given pattern of observed price behavior is or is not consistent with the assumptions of kinky demand theory.

If but a single firm is affected, and there is a kinked demand curve, the individual firm makes no price adjustments unless confronted with a considerable maladjustment, perhaps as a result of a large shift of demand or cost curves.[8] Very

[5] Paul M. Sweezy, "Demand under Conditions of Oligopoly," *The Journal of Political Economy*, XLVII: 568, 1939; Stigler, *op. cit.*, p. 432, n. 2.

[6] Stigler, *op. cit.*, pp. 438–441.

[7] Sweezy seems to have been thinking of the first case on pp. 568–9, and the second on p. 571, *op. cit.*

[8] In "Applications of the Discontinuous Oligopoly Demand Curve," *The Journal of Political Economy*, XLVIII: 422, 1940, M. Bronfenbrenner has suggested measures of rigidity. His range of demand price rigidity, however, is too wide. Rather than extend

few individual price changes are expected. Except for the automobile industry, the experience Professor Stigler refers to conforms in this respect.

During major cyclical swings such as occurred in the period from which Professor Stigler's data came, there are influences inducing consideration of price changes which are common to all firms. Industry-wide changes were to be expected. Professor Sweezy argues that the kink is altered under these circumstances because producers "revise their ideas about the probable reactions to alterations in their prices."[9] Professor Sweezy considers only changes in demand, but the effect of a pure change in the kink is most clearly seen in the case of changes in cost. Let businessmen believe that they are all similarly affected by an increase in costs, perhaps higher raw material prices or wage rates, and they also have reason to believe that all of them would be willing to accept an adjustment of prices to take the new situation into account. In the extreme case in which the margin of price over average cost is generally small throughout the industry, moderate cost increases will confront all of the rivals with the probability of losses, which all of them would prefer to avoid. As they come to expect that competitors will follow upward price movements as well as downward ones, the kink diminishes through a clockwise rotation of the upper branch of the curve and the two sections of the marginal revenue curve approach each other. Complete certainty that price increases will be followed eliminates the kink.[10] To the extent that the kink diminishes, the occasion for price rigidity diminishes. Indeed, unless the marginal cost curve crosses at the very bottom of the gap in the marginal revenue curve, the disappearance of the kink by rotating the upper portion of the demand curve will itself cause a rise in price. Changing to the expectation that others will follow price increases is sufficient to bring about such increases, without any increases in cost or in demand.

Changes in demand introduce a new element. Let a demand curve composed of two straight lines move horizontally to the right without altering the angle of the kink. The marginal revenue curve shifts half as far to the right, its upper segment extends downward farther than before, and it becomes more likely that

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points A and B horizontally to left and right respectively until MC is reached (see his Fig. I), one must shift the marginal revenue curve until its continuous portion cuts the marginal cost curve directly beneath the kink. In the case of a straight-line demand curve, the marginal revenue curve moves horizontally only half as far to the right as the demand curve; over the remaining horizontal distance to the kink it extends on downward, thus cutting the MC curve before output OQ_2 is reached in his Fig. I. A given horizontal shift to the left in the demand curve narrows the gap in the marginal revenue curve, principally by raising the lower portion. This lower portion thus cuts the MC curve at an output greater than OQ_1. Incidentally, with a horizontal or falling MC curve no horizontal shift of demand would be large enough to reach Bronfenbrenner's Q_1 and Q_2.

[9] Sweezy, *op. cit.*, pp. 571–2.

[10] Collusion is simply a device for obtaining complete certainty regarding others' responses. It arises here because there *is* a kink in the case of maladjustments affecting a single firm; its principal effect is to reduce or eliminate the kink in the case of maladjustments affecting all firms.

this upper section will intersect the marginal cost curve, warranting an increase in price even though the other firms do not follow.[11] A general increase in the demand for the product of the industry makes individual firms more likely to raise their prices even though others are not expected to follow, and in this way also warrants them in believing that others are more likely to follow. The resultant clockwise rotation of the upper branch further reduces the gap from the top, reducing the range of rigidity for upward price movements.

An increase in demand that leaves unchanged the elasticities (at the old price) of the two segments of the demand curve leaves the gap in the marginal revenue curve unchanged, both in length and in vertical location.[12] In this case, as for certain other conceivable types of increase in demand, the individual firm finds no reason in its own demand curve for altering its price.

General increases in costs or demand that are sufficient to alter expectations are likely to lead to price changes that are general throughout the industry. A rise in costs will probably be the more effective, because there is more likelihood of reasonable certainty as to how all are affected, and because the fear of losses may be a more powerful motivation than the hope of immediate gain. Moreover, though a few firms might be ready to act considerably before the others, a little patience on their part will be rewarded by a reduction in the harmful effects of a price increase if they wait until the others are thought ready to go along. Various devices, ranging from advance notification of price increases through the use of standard costing systems to price leadership[13] and explicit collusion, may be used to increase the likelihood of similar action.[14]

In such situations, the effect of the kinked oligopoly demand curve is to restrain individual price action, without limiting responsiveness to industry-wide increases in costs or demand to anything like the same degree, though simultaneous action is encouraged. Stigler's data on price increases are very much what one would expect. The businessmen in these industries would know whether general cost or demand increases had occasioned these general price increases. If so, they need not revise their expectations regarding how rivals would behave if there were no general cost and demand increases.

Industry-wide decreases in cost or demand might be expected to make one's rivals match one's price decreases more fully, but be even less willing than usual

[11] Such an increase in demand also widens the discontinuity in the marginal cost curve. (Let G be the length of the gap in the marginal revenue curve. $G = x[f'_1(x) - f'_2(x)]$, where $f_1(x)$ is the upper branch and $f_2(x)$ the lower branch of the demand curve [Stigler, *op. cit.*, p. 433]. A horizontal shift in the demand curve leaves the slopes unaltered, but increases x, and thus G.) However, this does not increase the range of rigidity for upward price movements, since only the distance between the marginal cost curve and the upper section of the marginal revenue curve is relevant.

[12] For $mr = p(1 + 1/\eta)$.

[13] Of Stigler's second type, the "barometric firm" whose changes are followed because they reflect general market conditions. Stigler, *op. cit.*, pp. 445–6.

[14] Stigler's analysis of general changes in demand and costs (*op. cit.*, p. 436) leads him to the conclusion that experience will show that rivals will follow price increases, so the businessman will learn there is no kink. But the (relative) disappearance of the kink applies only to industry-wide changes in demand and costs.

to follow one's price increases. They may thus sharpen the angle of the kink. The two segments of the marginal revenue curve pull farther apart, and prices become less sensitive to changes in cost and demand conditions, unless secret price cutting is possible. In the case of decreases in demand, however, a countervailing factor may also be at work. Let a straight-line demand curve shift horizontally to the left and the gap narrows: the lower end of the top section rises a little as the marginal revenue curve shifts to the left, while the bottom section rises considerably. When the bottom section intersects the marginal cost curve a price cut will be advisable even though other firms do follow. In this situation, confronted with an industry-wide decrease in demand it behooves each firm to be prepared to cut promptly once the cuts begin. Consequently, an individual reduction becomes an industry-wide decrease. The fear of losses of both profits and customers is powerful motivation. Some lags may occur, for since the first price-cutter will gain from any delay in other's responses, he need not hasten to inform them in advance. Of course the group as a whole may insist upon open price systems to cut down such lags, or may resort to standard costing or outright collusion to limit the extent of price cuts. Where secret price cutting has been possible, the industry-wide adjustments may simply be open recognition of an existing situation.

We may expect increased price rigidity in the face of general decreases in costs, in the absence of secret price cutting or some form of collusive behavior that gives greater flexibility. In the face of general decreases in demand, a greater degree of price flexibility is to be expected than for cost decreases, though not as large as for cost increases. Price decreases are likely to be industry-wide, though perhaps with lags on the part of some firms. If demand and cost decreases occur at once, a good deal of downward flexibility may be expected, for the marginal cost curve shifts downward as the lower section of the marginal revenue curve moves upward.

Hence, the industry-wide price decreases which Professor Stigler has found are not incompatible with the existence of kinked demand curves for the individual firms, nor would the experiences of businessmen in these industries necessarily lead them to give up the attitudes responsible for the kink. Before the economist can conclude from such data on actual price behavior that the kinked demand curve does or does not exist, he must also know how frequently demand and cost changes affected only one or a few individual firms and how frequently they were substantially industry-wide.

An alternative application of kink theory might hold businessmen's expectations constant, perhaps retaining a kink of the same angle at all times.[15] Until we know what expectations actually are, we cannot choose between these two approaches on a proper basis. However, assuming unchanged expectations is an awkward technique when applied to a group of firms. This procedure does not avoid the usual complications of an oligopoly situation, and one has to deal with such questions as whether a new kink appears immediately upon the quotation

[15] Such a criterion of "constant" expectations is arbitrary, but holding either the slopes or the elasticities of the demand curve constant at the original price would be also.

of a new price.[16] If the kink is set up on the assumption that other firms will adjust only to such changes in their fortunes as result from the action of a rival, it will be an incorrect estimate of the extent of their adjustment in those cases in which other changes in their cost and demand situations are also motivating them. Neglecting these further reactions will lead a firm to follow an erroneous price policy, which will probably require revision. On the other hand, the assumption that expectations change with the situation, plus the convenient assumption of reasonably correct anticipation of others' reactions to their own changed conditions as well as to the effects of a rival's price change, results in correct price decisions, decisions that may stand. A price pattern that can persist may be quite easily reached. Of course, we do not *know* whether entrepreneurs' expectations are so readily adjusted and so accurate. Where they are not, collusion, full-cost pricing, etc., may make satisfactory substitutes.

A difficulty of a more fundamental sort is the inherent inconsistency between one's expectations and reality if we make the symmetrical assumption that all firms in an industry believe themselves to have kinked demand curves. If each one believes himself the one primarily affected by firm A's price changes, he will be loath to follow increases, to be sure, *but also decreases*. If each believes that others are affected as himself, all will be rather likely to follow increases as well as decreases. And of course, if none of the competitors have kinky curves, they will be likely to follow in either direction.

Though one grants that the several firms differ in their expectations of each other's behavior, one comes back to the question why a firm should ever expect its rivals to follow only decreases in price. This assumption implies what is probably true, that they do not make precise adjustments to the situation of the moment. Indeed, some of them may be more concerned about enlarging their share of the market or merely avoiding losses than about maximizing their current net profits. If such is the case, attempts to predict their behavior on the basis of the type of demand curve they believe themselves to be facing will often be in error. For instance, the "inherent inconsistency" mentioned above may not actually arise because the motivation of the firms is not as we have supposed. However, the theory of the kinked demand curve is useful when applied to a single firm which is seeking to maximize net revenues in the face of changes in demand and cost affecting only itself. Applied to a group of firms, *precise* maximizing adjustments to the given curves are ruled out for many or most of the firms, if the expectations that cause the kink are correct. In this realm this type of analysis can be no more than suggestive of possibilities, perhaps the chief of which is an approach toward collusion.

[16] Stigler, *op. cit.*, p. 436.

BOOK REVIEWS

An Introduction to World Economics. By Ernest Minor Patterson. New York: Macmillan Co., 1947. Pp. xv, 704. $5.00.

Elementary courses in international economics often have suffered and probably still suffer from an overemphasis upon theories of international trade and exchange rate determination and an underemphasis upon the more factual aspects of a world of national economies. There is need, of course, for an adequate grasp of the more theoretical phases of international economics, particularly in advanced courses; but there is a limit to the amount of theory the representative undergraduate is capable of grasping. There is also need, especially in this day of the international ascendancy of the United States, for an extensive knowledge of the "facts of international life"—a need that international economics textbooks are seldom adapted to fill.

This latter need seems to be met in considerable measure by the book under review. "This volume undertakes to survey the world as a vast economic area by examining its population and resources and the business relations between its parts." It aims, despite the national basis of much of the data, to reduce "the significance of national boundary lines." The author states that he does not assume that the reader is thoroughly conversant with elementary international economic principles and he restates them in an "elementary way."

The book is divided into eight parts. The first deals with population (numbers, migration, distribution, population policy); the second, with natural resources (climate, food, raw materials, land, and power); and the third with the relation of resources to people and the significance of this relation for well-being.

Parts four to seven treat of international and interregional accounts, world trade, capital movements and organization, and financial mechanisms. Two chapters are given to the facts of international payments and one to theory. Of the 11 chapters on world trade, six are devoted to theory and five to factual matter. Parts six and seven are predominantly factual. Only part eight, comprising about one-sixth of the book, deals specifically with current world problems (i.e., food, raw materials, trade, and world organization). Every part is relevant to current problems, however.

The work is enriched by 56 illustrations and 77 tables based largely upon primary and secondary sources. The index is quite detailed and extensive, but not perfect.

No attempt is made here to evaluate the author's handling of various subjects, since this work is apparently intended for persons with the economic background of college juniors. Such evaluation is irrelevant. For example, it may be objected that the author does not state his findings sharply enough, and that he is not critical enough of the heterogeneous array of authors from whose works he quotes; yet he would probably reply that sharpness and criticism are not his objectives.

Duke University J. J. Spengler

The Problem of War in Nineteenth Century Economic Thought. By Edmund Silberner. Translated by Alexander H. Krappe. Princeton: Princeton University Press, 1946. Pp. xiv, 332. $3.00.

The approach of World War II witnessed a recrudescence in the United States of interest in the economics of war, of an interest that had been dormant since the advent of "normalcy" in the early 1920's. In consequence of this renewed interest, the work under review will command greater attention than it would had it appeared two decades ago.

Mr. Silberner's study deals with the place of war in nineteenth century economic thought in much the manner that his earlier study (*La guerre dans la pensée économique du XVI^e au XVIII^e siècle*) dealt with the discussion of war by prenineteenth century economists. The treatment falls under three main heads, the classical school, the protectionists, and the socialists. Under the first head the author treats principally the works of Malthus, Ricardo, and two Mills, MacCulloch, Cairnes, Fawcett, Say, Bastiat, and Molinari. Under the second he discusses the works of List and writers of similar persuasion and those of the German, French, and English members of the historical school. Under the last head he examines chiefly the works of Saint-Simon and his sect, the idealist socialists (Owen, Fourier, etc.), and the Marx-Engels group. Silberner's study includes, besides a fairly good index, a 24-page bibliography consisting largely of primary sources.

The subject of war is broad enough to permit many economic approaches. It may be approached in the narrow terms of economic warfare (e.g., blockade, diversion of materials, etc., from the enemy). Again it may be approached in terms of the utilization of a country's manpower, materials, etc., for the conduct of war, and this approach may be so defined as to include economic warfare proper. The second approach did not appear in English and American economic literature until World War I (cf. E. M. Rosenbaum, *Economica*, IX, 1942, pp. 64 ff., who also provides an extensive bibliography).

As has been suggested, Silberner's approach differs from either of these. He sets forth what nineteenth century economists have had to say about war under such headings as these: relationship of war to the economy, to economic evolution, etc.; economic causes and effects of war; external commerce and foreign relations; advantages and disadvantages of colonies; economic policy and national defense; economic policy and international concord; economic conditions of durable peace; economic effects of military disarmament; whether economic policy should be subordinated to politics, etc. Because most of the nineteenth century economists no longer viewed war as did the mercantilists, they did not express themselves in terms approaching total economic mobilization and adapted to advances in technology and bureaucratic control.

The liberal economists looked upon war as socially harmful, condemned bellicism, and were optimistic that liberal principles would be accepted and bring about the final triumph of free trade and international peace. The protectionists looked upon war, much as had the mercantilists, as unavoidable manifestation of the inevitable international struggle for economic advantage; their

theories and policy recommendations were couched accordingly. The socialists condemned war even as did the liberals, but they found its cause in the existing economic system and its cure in the introduction of a socialist regime.

Duke University J. J. SPENGLER

Economics: Principles and Applications. By James H. Dodd and C. W. Hasek. Cincinnati: South-Western Publishing Co., 1948. Pp. vi, 729. $4.50.

The style of writing and phraseology of *Economics: Principles and Applications* differs markedly from that usually found in such texts. As a modern-language Bible seems to lack sanctity to those accustomed to the King James version, so may this seem a bit unfamiliar to those steeped in the literature of economics. Nevertheless, it should be more readily intelligible to any new readers fairly classed as college students. For that reason it permits a reasonable assumption that students who read the text understand it, thus making clarification of the text unnecessary and leaving the instructor free to delve more deeply or range more widely from this well-established base. Such amplification is particularly needed where the instructor wants to emphasize such phenomena as business cycles, which are simplified to the point of looking like skeletal remains.

The authors have followed the familiar, but still disappointing, practice of discussing current questions up to the point where the reader has his mouth open to bay "treed" at the answer, and then changing the subject. For them it is a safe practice, and it does call attention to vital questions, the answers to which are badly needed but not known.

The text is well equipped with teaching aids in the form of questions, problems, and supplementary reading suggestions at the end of each chapter. Objective tests for class use and a teacher's manual may be had free from the publisher. In fact nearly everything is supplied except a grader. The text should, therefore, be particularly good for use by new instructors.

Unfortunately many freshmen and sophomores cannot read even a familiar language with any clear and precise understanding, and become almost completely baffled by the strange vernacular of economics. This text may well appeal to them and also to veterans who have a tendency to prick up their ears when told that the course is a study of the science of making a living, but who quickly become impatient, bored, or contentious when led into a maze of theoretical reasoning which seems to have little connection with the price of oleomargarine.

The strongest features of this text seem to be its simplicity of statement, a fair presentation of the more generally accepted principles in relationship to actual situations, and recognition of recent developments and trends.

University of Mississippi KARL MORRISON

Principles of Economics. By Frederic Benham and Francis M. Boddy. New York: Pitman Publishing Corp., 1947. Pp. xi, 430. $3.50.

According to the authors, this text is "intended for use in a one-semester introductory course in the principles of economics." Consequently, the contents of

the book run the gamut of an orthodox, basically Marshallian presentation of economic principles in a series of short, concise chapters which vary in explanatory detail. "Rent," for example, is discussed in chapter 21 in five pages with 10 subjective-type questions occupying an additional page. On the other hand, the chapter and questions on "Money" cover 20 pages. Some attention is given to Keynesian economics. A chapter on unemployment and the trade cycle is included.

The text contains 30 chapters organized into six sections. Beginning with the aims and institutions of economics the reader proceeds through production theory, the theory of costs, distribution, international trade, and the government and economic life. These sections are clearly written and easy to read. Emphasis is placed on logical analysis and the authors do not hesitate to draw conclusions or to justify their selections of materials. Very little discussion of the history of economic institutions is found in the book.

Points of reference to which the descriptive and analytical portions of the text are directed include maximum output, greater security, and reduced inequality. Diagrams are not used extensively, although the customary cost and revenue curves are included. The authors rely on short numerical examples to illustrate most of the important principles that are discussed.

Unfortunately, the beginning student reader of this text will look in vain for specific chapter references in the suggestions for further reading which are listed at the end of each chapter in the book. The individual firm analysis is not exhaustive but is limited in keeping with the rest of the text. On the whole the authors do a commendable job of presenting the principles of economics in a concise form without repetitious explanation.

Emory University DONALD J. MAY

Fundamentals of Economics. By Myron H. Umbreit and others. New York: McGraw-Hill Book Co., 1948. Pp. xi, 461. $3.75.

This book is a competent addition to a large and ever growing literature designed to introduce college students to the study of economic principles. The book is written for freshmen and sophomores and therefore the authors have kept the expression and the style easy to follow. Though the book is modern in its viewpoint and theories, the general organization is along traditional lines.

Some will criticize the fact that the text does not contain as much illustrative material as found in some similar books. These authors did not write leisurely and at length and hence seem to have overlooked the principle: "short writing makes long reading." However, it must be remembered that this text is introductory in nature and therefore the effort was made to make the discussion as clear, concrete, and to the point as possible.

The authors' discussion of price and price determination is particularly commendable for its concreteness and realism. The reader emerges from the discussion with concepts that are clear and which make sense rather than with hazy ideas and a hope that he understands a sufficient amount to pass the course.

The treatment of money and credit is much less satisfactory. Here complete-

ness of treatment has been sacrificed for brevity. A number of other topics, necessary to a full understanding, should have been included to make the presentation better rounded. If students are to go on for further study in the field of economics, such a treatment may be adequate. On the other hand, for the non-economics student, this treatment is meager to say the least. Supplementary reading could fill the gap, however.

This book certainly should be examined when a new adoption is considered and will undoubtedly be well received by both students and teachers.

George Peabody College for Teachers JAMES E. WARD

Die französische Währungspolitik von der Stabilisierung bis zum Ausbruch des zweiten Weltkrieges (1928–1939). By A. Stabinger. Berne: Francke, 1946. Pp. xi, 182. S.fr. 12.80.

The great merit of this book is that it presents for the first time for the German reader events that after years of struggle and indecision marked a definite turn in ingrained traditions of France's monetary concepts and institutions. There is no need to take exception to some statements which are not quite correct, but have no direct relation to the particular issues involved.

The study pursues the various stages of a development that followed the legal stabilization of the French franc and the first departure of the note issue from the long-preserved system in 1928. In the period from 1936 to 1938 French currency could not escape irresistible decomposition. In a slow process, national prejudices and a state of conviction were overcome which clung to the principles of the gold bloc even after its foundation within an international world had become too narrow. Finally, coupled with another cautiously maneuvered devaluation, innovations were accepted through which France yielded to the aims of modern internal and external monetary management, although the popular preference for gold continued. Gradually its various techniques were applied and even open market operations were adopted which had been persistently avoided in the past. In this course France joined the group of countries to which she belonged historically, economically, and politically. However, this shift, while it was in progress, was overshadowed by facts in which her whole existence was at stake. It happened under these circumstances that the monetary transition became interlocked with the economic and financial conditions under which France mobilized for the second world war. On the other hand, all these occurrences observed in France have to be understood as but one phase of a continuous development of world-wide adjustments.

The author examines the sequence of facts by disclosing the forces that resulted in legislative actions, by describing the manner in which the monetary administration operated on this new ground, and by setting forth the immediate outcome of the reform. He deliberately abstains from an evaluation of the fundamental character of the chosen devices, thereby treating the particular French experience as a test case for the theoretical problem. Since the factors that determined objectives and measures and influenced the actual effects in the earlier stages of the operation were very complex, he embarks on a "sociological" approach and

undertakes an inductive and descriptive investigation. Among the forces that in many respects can be seen as ultimate causes he stresses the weight of psychological motivations. In the interpretation Eleanor Lansing Dulles gave for the development of the French franc in the period from 1914 to 1928, she emphasized the preponderant power exercised by such impulses under the particular political climate of France, its economic structure, and social stratification. The general state and the fluctuations of public opinion which were reflected in speculative activities stimulated or relaxed the inflationary course and influenced the working of public financing. This was often more decisive than the effect of mere monetary factors on prices.

The originality of the study has its natural limits, since it gathers its material mainly from existing monographs, among them a great number of dissertations from periodicals, and from some daily papers. Documentary sources could not be tapped. Apparently, the writer had no access to American literature on the subject. The books by E. L. Dulles, F. H. Rogers, and the clear-cut study by P. F. Vineberg, who covered also the later period on which Stabinger concentrated, could have served as guiding models for profound analysis. But even so he gave the faculty of the University of Zurich in his first publication a promising test of his ability.

University of North Carolina FRANZ GUTMANN

Economics: An Introductory Analysis. By Paul A. Samuelson. New York: McGraw-Hill Book Co., 1948. Pp. 622. $4.50.

A careful reading of Paul A. Samuelson's *Economics: An Introductory Analysis* has enhanced this reviewer's respect for the art of textbook writing. This 608-page book was written on the assumption that the beginning student's introduction to the broad and fascinating subject of economics should cover: (1) those economics topics important for understanding the postwar economic world, and (2) the topics people find most interesting. Between these two objectives Samuelson has found a high degree of coincidence. The text is written on a high plane of sustained interest which is combined with the advantages of up-to-the-minute timeliness on most topics. The style throughout is lively and inviting.

The book is written in three parts: (1) Basic Economic Concept and National Income, (2) Determination of National Income and its Fluctuations, and (3) The Composition and Pricing of National Output. It comprises 27 chapters in all. Following the table of contents is a suggested outline for a one-semester course which includes 19 of the chapters in a somewhat different order than they appear in the book. Each of the chapters with the exception of the first and last (Introduction and Epilogue) is summarized at the close. In addition to topic headings, lengthy chapters are broken up into convenient sections. Each chapter, with the exception of the last, concludes with a list of questions for discussion.

Following appropriate chapters are brief appendixes devoted to the further development of such topics as basic accounting concepts, mechanics of interna-

tional finance, alternative quantitative paths to full employment, questions and problems on supply and demand, geometrical analysis of consumer equilibrium, graphical depiction of production equilibrium, and qualifications to the discussion of comparative advantage. At first glance the general organization of the text appears loose. A second look, however, confirms an impression of closely integrated development of topics which concerns itself first and foremost with the important policy questions and lets the lesser chips fall where they may.

It is not surprising that national income provides the central unifying theme of the book nor that the language in so far as it approaches the technical level is often Keynesian. It would be wrong, however, to label the work as Keynesian in content. Not only has Samuelson written with painstaking, step-by-step plainness on the theory that "short writing makes long reading," but he has with admirable self-restraint leaned over backwards to avoid expounding pet policy prescriptions. While no beginning text can ever be all things to all teachers of economics or to all students, there can be little doubt that this book is a notable addition to the field of economics texts.

University of North Carolina LOWELL D. ASHBY

Modern Economics. By Arthur Edward Burns and others. New York: Harcourt, Brace & Co., 1948. Pp. xvi, 954.

The reviewer of a new textbook of principles of economics is usually resigned to the facts that little new will be found in the book, and that his review must consist of a statement of the adequacy of coverage of well-worn subject matter plus an evaluation of clarity of presentation. The usual review takes the form, "I like this book, but. . . . " This reviewer is not confronted with such difficulties. There are some very good things in this new book by Burns, Neal, and Watson that have not been appearing in introductory textbooks. In this review, the period can be put after the statement, "I like this book."

The authors develop the national income approach to economics, and give the beginning student an excellent introduction to macro-economics, and to a few of the important ideas of J. M. Keynes. Extensive use is made of statistical data from a well-chosen variety of government and private sources. Graphic presentation is superb; clarity and precision of exposition are of high quality; a smoothness of organization is attained that must have been difficult in the first edition of a textbook resulting from collaboration of three authors. Although the national income analysis is well developed, and its strengthening influence is quite apparent, the over-all tone of the book is more accurately described as neoclassical than as either national income or Keynesian.

The attitude with which the authors approach their task is well expressed in their introduction, "All important decisions of national economic policy are fundamentally political in their motivation as well as in their consequences. Therefore, in our view, economic policy cannot be evaluated only in economic terms; for this nation it must be appraised in the light of the political traditions of a free society" (page xvi). The authors are truly writers on political economy, and emphasize the role of government in private economics.

One of the important contributions of the authors is their less than usual attention to the individual firm, and their correlatively greater attention to the economic organism as a whole. In this scheme, the economics of distribution receives somewhat less attention than it gets in the more traditional texts.

It should perhaps be noted that, in pointing out elements of difference between this and other texts, there is no implication that this book is a radical departure from older books; it is, rather, a refreshingly effective synthesis of tested neo-classical principles with the thinking of modern students of economics.

Burns, Neal, and Watson have performed an important service in preparing this text, and it is to be hoped that their book is one of a new generation of principles of economics texts which will get away from traditional but hypothetical worlds, and will get more deeply into the quantitative realities of modern economics, which put meat onto the bones of the theory.

North Carolina State College FRANCIS E. McVAY

Basic Data of the American Economy. By W. Nelson Peach and Walter Krause. Chicago: Richard D. Irwin, 1948. Pp. 209. $2.00.

This work provides the teacher of economics with a valuable and fairly complete teaching aid. For the instructor who wishes to supplement his classroom presentation with statistical evidence, this compilation supplies ready and readable data. The tables, charts, and pictograms are carefully presented and quickly tell the story which the authors have in mind.

Teachers of statistics and economic resources as well as the instructor of the basic principles course should find this work a helpful source book. The authors have successfully achieved their purpose of supplying the student with basic information concerning the American economy.

Alabama Polytechnic Institute GEORGE W. PATTON

Studies in Financial Organization. By T. Balough. Cambridge: University Press; New York: Macmillan Co., 1948. Pp. xiii, 319. $4.50.

While it would be impossible to determine it from its title, *Studies in Financial Organization* is a descriptive analysis of some of the major British financial institutions. Divided into three fairly independent parts, the book covers the great commercial banks—or *clearing* banks, as designated in the book (Part 1); the London money and discount market (Part II); and other London banking and finance firms such as investment banking houses, the international banks, and acceptance houses (Part III). Treatment of the Bank of England is limited to its relations with the other institutions. The period covered is the interwar years, except for incursions into the history of some of the outstanding banking firms. In spite of its recent publication (the publication date in this country is March 8, 1948), the book gives no attention whatever to the financial developments of the recent war and postwar years—but the author makes no pretense of so doing. "The World Crisis" as used in the book is the monetary collapse of 1931. There have been so many world crises since that time that to

use the term in its context here is a bit confusing; as is the use of "postwar" to refer to post-World War I.

But judging the book on what the author purports to do, and that is the only fair way to appraise it, it is excellent. Certainly the American student without intimate contact with the British financial structure will find a mine of information, and if the British student is no more familiar with his institutions than the American student generally is with *his*, the book should be very useful at home as well.

Two parts of the book warrant especial mention, even in this brief review. One is the section dealing with commercial banking. The author is to be complimented upon the amount of useful information found in the short space of 118 pages devoted to the topic. Not only is there found a clear and informative description of the British banking system, but there are injected into the discussion many points concerned with banking generally. Particularly pertinent are the analyses of the advantages and disadvantages of branch banking, of means of reducing banking costs, and of the impotency of the commercial banks to oppose a monetary policy supported by the central bank and the treasury. The author's handling of the problem of the freezing up of the flow of investment funds is the other topic that should be mentioned. The discussion here is highly suggestive of the problems facing small businesses in this country. It also contains suggestions as to some of the underlying difficulties facing Britain as a nation in her efforts to revive productive output.

University of Florida JOHN B. MCFERRIN

The Economics of Money and Banking. By Lester V. Chandler. New York: Harper and Bros., 1948. Pp. xiv, 732. $4.50.

Professor Chandler has designed this book as a text for a first undergraduate course in money and banking for liberal arts students. Consequently he has restricted his analysis to the description of the operation of our monetary system and does not attempt to deal with technical aspects of either monetary theory or banking practice. In general, the author explains the present monetary system and presents a minimum of critical analysis.

The author withholds his entire discussion of the theory of the value of money until the last part of the book. While this plan has the merit of providing the student with relatively simple and interesting introductory material, it makes the exposition of both central banking policy and international exchange more difficult.

The chapter which deals with the credit policy of central banks develops the role of treasury policy in the determination of credit conditions. This is especially noteworthy in view of the increasing importance of federal fiscal policy in the sphere of credit control. However, the limited discussion provided does not clearly distinguish between treasury policy under legislation no longer effective, policy under legislation now in force, and policy under legislation which could conceivably be enacted in the future. There is no discussion of

the relationship between the credit policies of the treasury and the central banks. The treasury action described is relatively unimportant when contrasted with the tax and expenditure powers of the federal government. In the opinion of this reviewer, insufficient attention is paid to the influence of the present federal debt on both treasury and central bank policies.

The discussion of the theory of the value of money follows the most recent theory. Special attention is paid to the ideas of Keynes and Hawtry and the discussion is related directly to the problems of the business cycle. The author makes use of the Robertsonian period analysis and his discussion of interest rate determination leans heavily on Keynes.

Professor Chandler does not attempt to discuss the many proposals for reform of our monetary system. He does discuss most of the problems which these proposals are designed to remedy.

On the whole the book is well written. Some parts may be considered radical by economists who cling to the older ideas concerning the theory of the value of money, interest rate determination, and business cycle analysis. It should provide beginning students with an adequate understanding of the operation of our present monetary system.

University of North Carolina JOE S. FLOYD, JR.

Money, Debt and Economic Activity. Albert Gailord Hart. New York: Prentice-Hall, 1948. Pp. xviii, 548. $6.65.

No longer does monetary analysis merely explain the general price level. Almost every branch or sphere of economics has its monetary aspects. The theory of unemployment, the theory of prices and of bank credit inflation, the study of public finance, among others, all have their monetary aspects.

The objective of the book is to analyze the factors that contribute to economic stabilization with emphasis upon (1) stabilization of employment, and (2) stabilization of prices. In arriving at the climactic section of the book, Part V, Professor Hart makes an institutional approach through banks and banking (Part I) in which "debt structure" plays a significant role.

The analysis of the value of money (Part II) is approached from four points of view, namely, (1) the commodity approach, (2) the transactions velocity approach, (3) the payments approach, and (4) the cash balance approach analysis in such a manner that its controversial aspects are subdued.

No attempt is made to discover the origin of a business cycle (Part III). The business cycle is a datum and the course of its development through the stages of recovery, full employment, crisis, and recession is described. The importance of monetary forces is emphasized in the development of a complete cycle.

International monetary relations furnish the general subject matter of Part IV. Business fluctuations do not recognize political boundaries. The whole world furnishes the stage upon which the plot of the business cycle is unfolded.

The book is enriched with notes on supplementary readings and on alternate points of view at the close of each chapter. The presence of ample footnotes

affords the reader an opportunity to enter upon a much deeper and more complete analysis than is presented in the body of the book.

Money, Debt and Economic Activity is somewhat of a departure from the traditional text in money and banking in that it omits many of the historical aspects of money and of banking. Biemetallism is mentioned twice in the body of the book and twice in the footnotes, but nowhere is there any pretense of an explanation of it as a monetary standard, nor is there any more than an historical reference to its use in the United States. The role of silver, as portrayed in the Bland-Allison Act, the Sherman Act, the Pittman Act, and the Silver Purchase Act of 1934, is brushed aside. National banking is referred to several times, but not in the traditional manner. It is somewhat refreshing and stimulating to read a book in this field in which its author has been bold enough to break with tradition and to make his approach to money from the point of view of debt and debt analysis.

This reviewer has been in communication with the editor regarding the clarification of the analysis of the relationship between an unfavorable balance of trade on service accounts and a favorable balance of trade on commodity accounts as found on pp. 358–359.

University of Florida FRANK W. TUTTLE

Personal Finance. By Elvin F. Donaldson. New York: Ronald Press Co., 1948. Pp. x, 499. $4.50.

For more than ten years, the text by Jordan, later revised by Willett, has enjoyed a virtual monopoly of college courses in personal finance.[1] Donaldson's book introduces some welcome competition in the field and provides a much more thorough treatment of most of the topics covered. It is logically arranged and so written that it is suitable for either the beginning student in college or the more mature person interested in the book as a practical guide to the management of his own finances. Questions at the end of each chapter are confined to matters discussed therein and provide a convenient means of testing the student's understanding of the material.

A little more than one-fifth of the book is devoted to credit and installment buying, bank accounts, checks, bills of exchange, and notes, including a very good summary in short space of the negotiable instruments law. Another fifth of the book is given over to insurance, annuities, and social security. There are two chapters, constituting about one-eighth of the book, on savings and government bonds, and two chapters on owning and financing a home. Nearly one-fourth of the book is devoted to a discussion of security investment and speculation, which is probably somewhat out of proportion for a book of this type, but these chapters are well done and could serve as a substitute for the usual course in investments given in many colleges. The last two chapters deal with taxes, wills, and trust plans. Donaldson presents the pros and cons of each topic quite fairly, but does not hesitate to express his own opinions and offer advice.

[1] David F. Jordan and Edward F. Willett, *Managing Personal Finances*. David F. Owen's *Controlling Your Personal Finances* was never widely used and is now out of date.

There is also a chapter on budgeting and record keeping, which is too brief and is one of the weaker parts of the book, presenting in general a negative rather than a positive approach. Partial adherence to the accounting distinction between capital and revenue expenditures makes for the usual confusion in the classification of budgetary items. Some will find it peculiar that the purchase of an automobile is classified as savings (p. 74), while expenditures for education are not (p. 71). Apparently also the total amount of installment payments on an automobile is to be considered savings (p. 70), while in the purchase of a home only the part of the payment that goes to reduce the principal is so treated (p. 76). Failure to make clear the distinction between savings from a budgetary viewpoint treated in chapter 4 and liquid savings discussed in chapter 8 may be a source of confusion to some.

Donaldson's style of writing is direct and matter-of-fact but lacks the felicity of expression that characterizes much of Jordan's original text.[2] The author is at his best in his factual presentations and for the most part seems to have his facts quite straight. Some will be surprised to read, however, that "St. Thomas Aquinas was the first among our ancient philosophers to realize that money is productive" (p. 142), and that stores offering charge accounts do not charge higher prices for the same goods than other stores (p. 17). If the latter statement is really true, it is important enough to justify the introduction of supporting evidence.

Readers will be critical of some of the advice given according to their own experience and viewpoints. To the reviewer the advice in chapter 11 on how much life insurance to buy and on selection of a company appears quite poor. In chapters 10 and 11 the author recommends term insurance for those who cannot afford adequate insurance coverage with other types of policies, but does not seem to realize that this includes a majority of the population.[3] He emphasizes the important advantage of limited payment and endowment policies in forcing regularity of savings, but does not mention the offsetting disadvantage of having the savings and insurance combined in the same contract.

These and other defects that may be noted in the book, however, are relatively minor. Most instructors teaching the course in personal finance will probably choose it as a text until something better comes along.

Millsaps College E. S. WALLACE

[2] The discussion of some topics is unnecessarily prolonged by the inclusion of such remarks as "leftovers should be saved and served again in some appetizing form" (p. 68), "electric lights should be turned off when not in use" (p. 69), "a person should always consult a doctor, a dentist, or an oculist when he believes that his services are needed" (p. 72), and "the depositor should sign his name legibly enough for the bank clerks to determine whose account to charge" (p. 104).

[3] On page 211 Donaldson states that "with a given amount of money with which to pay premiums, the term policy will give about four times as much insurance protection as a 20-year endowment policy, and about twice as much as a whole life policy," whereas the figures given on the same page show that for the same expenditure, at ages up to 45, the term policy gives 5 to 7 times the protection of the endowment and 2½ to 3 times the protection of the whole life.

Corporation Finance. By Hiram L. Jome. New York: Henry Holt & Co., 1948. Pp. x, 676. $4.00.

Dr. Jome, whose duties as head of De Pauw University's Department of Economics have restricted his writing to magazine articles since his brilliant 1925 analysis of the *Economics of the Radio Industry*, has again produced a fascinating treatment of a commonplace subject. *Corporation Finance* is orthodox only in the sense that it presents a comprehensive discussion of the financial problems encountered by the modern corporation. Its readability is reminiscent of Broadus Mitchell's *General Economics*, brought out by Dr. Jome's publishers in 1937. It is to be feared that Dr. Jome's book may meet with the criticisms directed toward Dr. Mitchell's offering—that it oversimplifies a complex subject. It is the belief of this reviewer, however, that if *Corporation Finance* is not adopted as a text, it should at least form part of the library of any teacher of the subject.

As Dr. Jome makes clear in his preface, *Corporation Finance* "is not intended for students planning to become experts in finance." As such a work, the book is a splendid presentation of the fundamentals of corporation finance. Dr. Jome's sprightly style makes many aspects of his subject come alive as few other writers in the field succeed. Sprinkled with quotations from *The Grapes of Wrath*, *The Book of Daniel Drew*, and similar unusual references, this is perhaps the most readable financial text to appear in many years.

The general character of Dr. Jome's offering may best be understood through reference to his handling of such topics as incorporation, the appropriate capital structure, recapitalization, stock impairment, and so on. In each of these, and in numerous other financial problems, the author makes his analysis concrete by presenting simple arithmetic illustrations which the student who has never studied accounting can readily understand.

It cannot be overemphasized that this is in all respects a *new* textbook in corporation finance. The large number of examples of corporate practices and the majority of references which are cited are judiciously chosen from the recent financial literature. It is to be hoped that the several quotations from Congressional *Hearings* will persuade readers to pursue their investigation of financial practices to this fruitful source.

Well indexed and with an adequate classified bibliography, *Corporation Finance* provides an excellent introductory treatment of its subject. Presented in three parts, Forms of Business Organization (50 pp.), Corporate Problems (300 pp.), and Social Aspects (200 pp.), the book gives more emphasis to the problems of finance as they affect our society than is usual. Yet 15 appendixes, plus refreshingly new problems at the end of each chapter, retain the flavor of a provokingly thoughtful and practical approach.

University of North Carolina J. T. O'NEIL

Pricing, Distribution, and Employment. By Joe S. Bain. New York: Henry Holt & Co., 1948. Pp. 496. $3.75.

This work is intended as a textbook for upper division courses in economic theory. It has two quite distinctive features. As the title indicates, the work

is concerned not only with the theory of product and factor pricing, but with the theory of employment as well. While the theory of employment is not as extensively developed as pricing theory and is not cast in the standard detailed Keynesian form, it is important to the book in that the author attempts to integrate it with the partial equilibrium price theory that constitutes the core of the book. This feature should make the work of general interest as well as recommend it as a text.

The second feature of note is the author's belief that economic theory can best be taught as an exposition of the workings of the economic system, rather than as a system of formal reasoning to provide tools for the solution of economic problems. While two initial chapters on demand and costs present the basic concepts used, there is no mention of tools as such. Since the author desires to explain the workings of the economic system to the student, all interest centers on the functioning of the various markets, both individually and collectively. As a result the theory of consumption receives no attention and the theory of production only slight attention. The author therefore has no need for indifference curves and physical product curves.

Undoubtably there has been an overemphasis on analytical apparatus at the undergraduate level. Yet many instructors may feel that the limited apparatus of demand, supply, and cost curves developed by Professor Bain is sufficient not only to furnish a reasonable explanation of the economic system, but to provide the student with tools for thinking through many of its complexities. Certainly no true dichotomy exists and the instructor who emphasizes the latter approach should still find Professor Bain's work quite satisfactory.

Other notable features of the book, beside good expositions of monopoly, monopolistic competition, and pure competition, are the space and the interest devoted to oligopoly and the excellent exposition of the imperfect nature and importance of factor markets. Throughout the discussion of the theory of pricing the over-all nature of the economy is stressed and the general significance of the various market structures to its operation is considered.

The treatment of interest, of course, presents a problem. Professor Bain utilizes a loanable funds explanation and skillfully relates it to the savings-investment approach for the determination of national income. Here the author is not upon such well-settled ground as in the exposition of price theory. Yet the ingenious eclecticism involved should appeal to many economists. While by no means a simple text, because of its emphasis on the economic system as a unity, this textbook merits wide use, since it provides an excellent framework for an integrated and substantial course in economic theory.

Agricultural and Mechanical College of Texas AURELIUS MORGNER

The Labor Force in the United States, 1890–1960. By John D. Durand. New York: Social Science Research Council, 1948. Pp. xviii, 284. $2.50.

This is a careful and comprehensive report, summarizing present information and understanding concerning the nation's labor force. Much of it is demographic as is indicated by the chapter headings: Past and Future Labor Force

Trends, Demographic Factors, Economic Factors, Changing Customs Relating to Employment of Women, Wartime Expansion and Postwar Contraction of the Labor Force, Future Labor Force Projections, and Demographic Aspects of Labor Force Policy. The appendixes, covering 70-odd pages, are concerned mainly with adjustment of the census labor-force statistics to make them more comparable from one decennial year (or one period) to another, and with methods of projecting labor-force trends and analyzing factors in labor-force change.

The economist is struck by the fact that much more is known about trends and changes in the over-all labor force (all breadwinners, whether employees or self-employed) than is known about the labor supply (the quantity of work offered for sale). The book treats only briefly labor-supply questions as posed by economic theory. Dr. Durand concludes that there are a priori grounds for believing that the propensity to be employed (the labor supply) might be associated either directly or inversely with short-term variations in wages and labor demand and that the factual data now available fail to show definitely what the short-run relationships between employment and income changes and the labor supply have been in the past or what they are likely to be in the future. A better statistical basis should eventually be provided for determining the short-run supply curve of labor for the country as a whole, if the current program of monthly measures of labor-force changes is continued.

The author's treatment of expansion and contraction in our labor force from 1940 through 1947 is careful and complete. He explains the facts that lend support to the hypothesis that perhaps three quarters of a million of the "excess" 7,700,000 workers drawn into the labor force by wartime circumstances will continue as part of the labor force in 1950 and that almost half a million will still remain in the labor force in 1960. In offering "projections" of the labor force in 1960 the author does so, not for purposes of exact prediction, but in order to consider factors that will influence trends in the future and to raise policy questions.

Princeton University RICHARD A. LESTER

Insights into Labor Issues. Edited by Richard A. Lester and Joseph Shister. New York: Macmillan Co., 1948. Pp. x, 368. $4.00.

In addition to the two editors the following economists contributed: Nathan Belfer, Gordon F. Bloom, Robert K. Burns, Neil W. Chamberlain, Robert Dubin, John T. Dunlop, Lloyd H. Fisher, Eugene Forsey, Frederick H. Harbison, Everett Kassalow, Clark Kerr, Clarence D. Long, Herbert R. Northrup, Lloyd G. Reynolds, and David R. Roberts.

To the reviewer the book is interesting primarily for the light it throws on the insights of a group who, "in general," as the introduction states, "obtained their Ph.D. degrees during the decade prior to Pearl Harbor" and "benefited from practical experience during the war, especially with the War Labor Board." This experience has given most of them a faith in the moderateness and constructiveness of big unionism that the reviewer wishes he could share.

Space permits reference to only a few of the articles. Harbison, Burns, and

Dubin properly stress the power aspects of labor-management relations. Fisher and Kerr trace the development of multiple employer bargaining in San Francisco with fewer but bigger and more disruptive strikes. Shister, aware of only three cases of union-management cooperation directed to reducing unit costs of production "when the bargaining unit was in a 'relatively' prosperous condition," concludes that short of an unlikely "transmutation in basic philosophy" the prospects are that full employment will involve either inflation or peacetime price control. Kassalow, a union economist, claims that the growing power of the unions has forced them to take into account broader social and political considerations. In similar vein, Forsey, director of Research for the Canadian Congress of Labor, concludes that, with full employment guaranteed, labor can be counted upon to support the functionally appropriate structure of wages. Ultra-Keynesians will be delighted with this article; the more orthodox will find it incredibly naïve. Lester continues his attack on marginal theory, failing here, as in his other articles, to distinguish between marginal physical product and marginal value product and between the effect on employment of a wage burden imposed after an investment has been made and the effect on future investment decisions. He generalizes on the basis of short-run reactions and then criticizes a theory which, as Belfer and Bloom point out, deals with long-run equilibrium.

No symposium in this controversial field can satisfy everyone. Whether it will "contribute to the development of more intelligent policies in industrial relations" seems doubtful.

Wabash College JOHN V. VAN SICKLE

State Labor Relations Acts: A Study of Public Policy. By Charles C. Killingsworth. Chicago: University of Chicago Press, 1948. Pp. x, 328. $4.00.

During the past several years most state legislatures have enacted some form of legislation dealing with industrial relations. While some attention has been given to single acts by a few writers this is the first attempt to deal with the various acts and their numerous provisions in a single volume. Due to the numerous and divergent provisions of the acts the task was not an easy one. The author has overcome these difficulties to a large degree by a masterful job of organization.

The author divides the acts into two groups, those patterned after the National Labor Relations Act, which he calls *protective laws*, and those laws limiting the rights of unions, employees and employers, which he calls *restrictive laws.* Under these two headings he makes a thorough analysis of the policies, provisions, and effects of all state acts.

The state acts are recognized as being very important, first, because they affect some 26 per cent of the nonagricultural labor force over which the National Labor Relations Board seldom if ever asserts authority, and secondly, because they form a basis or guide for future policies in dealing with industrial relations.

The book is not a mere description of the major provisions of each state act.

The author examines the actual operation of the most controversial state acts and several novel types of enforcement procedures. Numerous court decisions dealing with specific provisions of such acts are analyzed and explained. An index of all cases cited is found at the end of the book.

This study shows clearly that at the present time there is within the states much competition between the two alternatives in public policy toward labor relations. One policy would encourage and foster collective bargaining while the other would restrict it. While in some instances these two policies conflict, the author believes we may learn much from the experience of states in carrying out these two policies. He states, "It is not practical for the federal government to try out two or more possible policies toward labor relations: neither can the N.L.R.B. readily experiment with alternative methods for implementing basic policy. . . . Because we need much more education in this field, it is desirable that the states should continue the experimentation with ends and means in labor relations policy which, as this study has sought to show, has already proved to be most instructive."

The many state acts, other than labor relations acts, restricting unions and collective bargaining are summarized in Appendix A. Appendix B gives statistics on works stoppages, the number of workers involved, and man-days idle in selected states from 1934–1946.

In the near future we must devise ways and means to make collective bargaining work. At the present time there is much uncertainty as to what part public policy should play in accomplishing the desired end. This book will play a part in helping us find the desired course.

University of Virginia GEORGE T. STARNES

The Impact of the Undistributed Profits Tax, 1936–1937. By George E. Lent. New York: Columbia University Press, 1948. Pp. 203. $2.50.

This study undertakes to give the determinable quantitative effects of the undistributed profits tax, and then to appraise the broad consequences on the economic order. The first task involved the assembling of the relevant factual information (some from unpublished material); the second, the use of economic analysis. Following a brief history of legislative attempts to deal with the avoidance problem raised by the device of retaining earnings in the corporation treasury, the results of this two-pronged inquiry are set forth.

The undistributed profits tax was designed to force the distribution of dividends, thereby subjecting them to personal income taxation. On the basis of the usual relationship between earnings and dividends, this study estimates that dividends were increased by approximately one-third, or $1.1 billion, in both 1936 and 1937. The effects on major industry groups are shown. The chief departure from the usual rule of increased distribution was by the mining corporations, the dividend policies of which were influenced only slightly.

Small corporations increased their distributions proportionately more than large, but on account of a greater retention of earnings had more opportunity for increasing the percentage paid in dividends.

Comparatively few dividends were paid in forms other than cash. Corporation assets, probably securities, composed 2.7 per cent of all taxable distributions in 1936. Script, notes, and bonds were 2.2 per cent, and stock dividends, the taxability of which was doubtful, only 0.75 per cent. Small companies resorted to noncash dividends more than medium, and medium more than large.

Some expenditures, particularly for bonuses, executive salaries, maintenance, and advertising, were found to have been increased by the tax. Small companies appeared to have made more of such increases than large.

Despite the distribution of a larger proportion of earnings, and some addition to the amount of deductible expenditures, the undistributed profits tax imposed a direct monetary burden. The yield was $145 million in 1936, and $176 million in 1937. These amounts were 13.2 and 13.8 per cent, respectively, of the total corporation income tax liability in those years.

An analytical treatment, including factual material, is given of the determinants of dividend policy, and of the impact of the tax on corporation credit.

Nearly half of the book is devoted to the still broader questions of the relationship of the tax to the problem of obtaining capital, to the growth of business and monopoly, and to economic stability. A final chapter gives the summary and conclusions.

The tax was found to have placed medium-sized corporations at a disadvantage with respect both to small and to large companies. Such corporations were usually unable to arrange with their shareholders to return dividends to the treasury in the form of subscriptions to new stock. Nor were these companies large enough to sell their shares in the capital market on favorable terms. The beliefs were also expressed that concentration of industrial control was fostered; and that, assuming continuance of the tax, the cyclical swings of business would be intensified. On the other hand, it was thought that by reducing the proportion of the national income saved, and thereby increasing purchasing power, the tax brought about a more favorable relationship between savings and new investment. (It was estimated that, under this tax, consumer expenditures were $500 million more than they would have been under a tax on corporation income raising the same amount of revenue.)

These are only a few of the appraisals emerging from the study. On account of the space limit, they must be stated baldly without associated considerations. Clearly, though, not all these results are on such firm ground as the facts disclosed concerning the direct effects of the tax. But that is to be expected. No one can give a definitive answer to questions of such breadth. The associations with economic thinking raised by the mere mention of the words "savings" and "consumption," will illustrate the point.

This little work contains many of the essential facts needed for an exploration of the undistributed profits tax. This information is presented with interpretation and comment. The analysis is thoughtful and balanced. One feels on reading it that the author sought always to find and to express the truth, not to make a case. In the reviewer's opinion, he worked to good purpose.

Cornell University M. SLADE KENDRICK

Luxus und Luxussteuer. By Fritz Marbach. Berne: Francke, 1948. Pp. 84. Paper, s. fr. 6.

This is a report originally submitted to the financial administration of the Swiss Federation. Most of the book is devoted to a rather elaborate and repetitive statement that luxury is not a clearly defined concept. Depending on quantity and quality used, the same commodity may or may not be a luxury. Thus the author suggests that a tax on luxuries in a meaningful definition would not be feasible and, if feasible, not financially productive. From this verdict, he excepts taxes on certain alcoholic drinks and taxes designed to have a deterrent effect. He also feels that taxes on luxuries are not desirable from a social aspect because they aggravate rather than diminish class distinctions. (For illustration, he refers to a railroad engineer who wants to buy a gold watch for his wife, and he even alludes to the safety of the passengers which may possibly be influenced by the engineer's state of mind and his ability to buy the watch for his wife!)

After this argument one is surprised that the author concludes that the present Swiss luxury tax should be retained with modifications only in some minor details. He also argues in favor of the general sales tax which he defends on fiscal and social grounds. Only at the end does the reader begin to understand that the report was apparently written as an answer to a specific recommendation, namely, a proposed replacement of part of the present Swiss sales tax by an extension of the luxury tax. If directed against a proposal of this kind, many of the author's arguments are convincing, but it would have been helpful, at least to the reader who is not familiar with current tax debates in Switzerland, if the subject matter of the study had been clearly stated at the beginning.

Washington, D. C. GERHARD COLM

Production Cost Trends in Selected Industrial Areas. By Philip Neff and others. Berkeley: University of California Press, 1948. Pp. xii, 249. $4.00.

The Haynes Foundation continues its study of the Los Angeles area with this comparison of manufacturing costs 1929–1939 in six areas: Los Angeles, San Francisco, Chicago, Detroit, Cleveland, and Pittsburgh. The areas were evidently selected because they compete with the Far West for industrial location (p. 3); but they are neither representative of all areas in the United States nor similar in pattern, as the authors claim (*loc. cit.*) in the face of contradictory evidence presented (pp. 3, 165). Using Census of Manufactures data, the following ratios were computed, presented in uniform charts, and interpreted for a wide range of industries: wage earners per establishment, "value added" per wage earner, wages and cost of material in per cent of "value added." In the opening chapter, the significance of these ratios is very carefully examined and the underlying assumptions are fully spelled out (pp. 11–12). Chapters II to V discuss in great detail total manufacturing, durable, nondurable goods industries, and selected industries of special importance. A summary, an appendix on over-all trends 1899–1939, and statistical tables are added.

Although somewhat monotonous in presentation, Chapters II to V contain a

wealth of detailed information that should prove valuable to industrialists, promoters, regional planners, and economists. The great care taken in qualifying conclusions from statistics is particularly commendable.

As a first attempt at dealing with manufacturing costs regionally rather than nationally, however, the book is disappointing since no clear picture emerges from the wealth of details. This is not altogether the authors' fault; they extracted a maximum of information from data unsuited for finer analysis, and they had to confine themselves to a study of labor costs (except for a cursory discussion of other cost elements in chapter VI) which further limits the scope of the investigation. Among the general conclusions reached, the statement may be mentioned that "the drawing power of labor costs as a local determinant" is largest in industries where costs are more than 45 per cent of "value added" (p. 167) and that labor costs are particularly large (compared to value added) in industries not resource- or market-oriented (p. 169).

The study's weakest spot concerns cyclical patterns and trends from 1899 to 1939. In order to find "a trend which adequately describes the series and at the same time is fitted to all series in the same manner" (p. 187), straight-line trends were used regardless of fit, with some nonsensical results. Thus the authors find a trend ordinate for "value added," Los Angeles 1899, of −932.1 (p. 19 and Chart A on p. 188), which would mean—if it means anything—that over eight times as much value was destroyed as was actually produced in that year. There is no justification for such uniform treatment. For trend comparison, the shape of trends is as significant as their direction, and for a study of deviations from trend, the trend shape is immaterial as long as it fits the data and makes economic sense. However, straight-line trends seem to be adequate for the shorter period from 1929 to 1939 to which the main body of the investigation refers.

University of Georgia GREGOR SEBBA

Managerial Enterprise: Its Growth and Methods of Operation. By Oswald Knauth. New York: Norton & Co., 1948. Pp. 224. $3.00.

The author of this study is dissatisfied with the traditional concepts of competition, monopoly, monopolistic competition, oligopoly, etc., that are used to describe certain characteristics of our economy. He coins the term "managerial enterprise" to describe what he calls a "new form of economy."

The distinguishing characteristics of this form are large overhead and sunken costs and the corporate form, both of which require long-run rather than short-run operations. The managerial enterprise can produce cheaply only when it can employ mass-production methods which require that production be planned in advance and carried continuously at full capacity. It is not adapted to operating in markets, for either its product or its materials, that fluctuate widely or frequently. It requires, on the other hand, stability and certainty with respect not only to prices but to quantity, quality, delivery dates, and other terms of purchase or sale. It seeks security through trade advantages of all kinds such as established contacts, long-term contracts, good reputation, and

consumers' habits. The objective of managerial enterprise is thus neither the greatest price advantage in the short-run market, nor complete control over the market, but merely a secure place in the market.

Some may see in this system of administered prices and in this need for "trade advantages" nothing more than the traditional tendency toward monopoly —probably in a new form. However, whether the author makes his case or not he has brought to light many new aspects of a complex problem. He has done a scholarly piece of research and he has produced a very readable and informative little book.

University of Alabama E. H. Anderson

Investment, Location, and Size of Plant: A Realistic Inquiry into the Structure of British and American Industries. By P. Sargant Florence, assisted by W. Baldamus. Cambridge: University Press; New York: Macmillan Co., 1948. Pp. xiii, 211. $3.75.

This volume is No. VII in the series, "Economic and Social Studies," of the National Institute of Economic and Social Research. Using raw data from the British *Census of Production* and the U. S. *Census of Manufactures,* Dr. Florence, professor of Commerce at the University of Birmingham, has examined statistically the relationship between location and size of plant and between investment and size of plant in different industries.

Transportation cost makes for smaller-sized plants while volume utilization of specialized equipment in assembling industries (automotive, for instance) makes for larger-sized plants. Economists have always known this; Florence has proved it once again. The trend toward "intensification of investment in manufacture coupled with cheapening of transport will . . . result in larger plants yet (*sic*)."

Florence wisely makes no claim that his statistical analysis is anything more than "an opening stage in the more exact statistical study of real industrial conditions, relations and trends."

Decisions on policy with respect to dispersal of industrial capacity to minimize the danger of a Pearl Harbor of the air will not be much aided, apparently, by statistical analysis of localization factors obtainable from data presently available in the *Census of Manufactures.*

Emory University Buford Brandis

Introduction to Business. By Lewis A. Froman. Chicago: Richard D. Irwin, 1948. Pp. x, 601. $4.25.

Dr. Froman, dean of Millard Fillmore College and professor of Finance at the University of Buffalo, has written one of the better texts for use in the introductory or survey course required in many collegiate schools of business administration.

Organization of the material—little of which is new—is admirable. The author examines "The Functions of Business Enterprise," "The Nature of

Business Enterprise," "Problems of the Business Unit," and "The Role of Government," in that order.

The book suffers from the terrible malady common to the species—it is long on fact and short on philosophy. The reviewer believes that schools of business can no longer afford to turn out graduates who will never in their lives read any part of *The New York Times* except the business section. The introductory or survey course must be used primarily to acquaint the student with the role of the businessman in the society of his country and the world. The content of the course must move away from balance sheets, graphs, and tables—all of which the student will encounter in later courses—toward the sort of material on our society and the world and the businessman's role therein which *Fortune* presents so admirably.

Emory University BUFORD BRANDIS

Open Markets. By Vernon A. Mund. New York: Harper & Bros., 1948. Pp. xi, 272. $3.00.

As a method of restoring competition in large segments of our economy, Dr. Mund advocates the establishment of one or more organized exchanges for each commodity than can be graded and stored. The federal government, he suggests, would supervise the trading in these commodities to insure that all wholesale transactions are made on an exchange, that prices are arrived at by competitive bidding, and that any person may buy without restriction as to quantity or use. For many commodities, the convenience of the trade would justify a number of such "open markets" at which goods would be sold for immediate delivery. Trading in contracts for future delivery would be concentrated in a single exchange at the appropriate financial center.

For commodities not subject to grading, such as manufacturing specialties, Dr. Mund recommends that the government encourage "informal markets" in which all may buy freely without geographical price discrimination, and full publicity would be given to prices.

The prevention of trade outside the exchanges and the maintenance of competition on the exchanges through government supervision is the very heart of the plan. In a survey of the history of markets in this country and in Europe, Dr. Mund points out the need for such supervision and the many occasions on which it has been exercised. Large firms generally have opposed open markets as limiting their opportunity for profit. In this country within the last 50 years many such markets have been destroyed as the members of a trade secured sufficient unanimity on policy. Horizontal combinations appeared to check the type of competition that open markets provided, and vertical combinations followed since the remaining firms were unsure of their outlets and their sources of supply. It is an essential part of Dr. Mund's program that "monopolistic mergers" be dissolved, without, however, disturbing the operation of single plants. In this respect his views are similar to the "limitist" proposals of Fred Raymond, which appeared late last year.

A thin volume such as this obviously seeks but to launch discussion, and Dr.

Mund and others will wish to explore the issues more fully. A few major objections stand out. There is the easy assumption that modern industry and agriculture can cover overhead costs under competitive conditions. Administration of a law against forestalling the market would be a formidable task. Price reporting for unstandardized goods is unworkable, both because of the almost limitless variety of such commodities, and because of the ability of the buyer and seller to conceal important features of their contract. The proposals are directly counter to the trend of our times, and no government would adopt them without the sponsorship of strong interest groups in its economy. Such support has always existed in the past where governments have establshed open markets over formidable opposition.

University of North Carolina FRANK J. KOTTKE

STATE REPORTS

ALABAMA

The work stoppage in the coal industry in Alabama during April 1948 brought about a substantial reduction in the level of industrial production for that month. The index of industrial activity for Alabama prepared by the university's Bureau of Business Research slumped to 154 per cent of the 1935–39 average year, a decline of over 20 points from March 1948. The stoppage was of relatively short duration, however, and at the end of May the index had climbed to 193. Commercial and financial activity was unaffected by the temporary decline in production; in both of these phases of economic activity high levels were maintained throughout the second quarter of 1948. Employment also reflected accelerated activity during the second quarter of the year. Seasonal expansion in agriculture and construction was an important contributing factor. The monthly estimate of manufacturing employment by the State Department of Industrial Relations showed that there were 228,000 workers engaged in manufacturing industries on May 15, 1948.

With three more months remaining in the fiscal year 1947–1948, Alabama's tax collections from 40 principal sources are only $10,000,000 less than last year's collections. Revenues for the current fiscal year are running 15 per cent ahead of those for the corresponding period last year. The largest revenue producers in the order of their importance are the sales tax, gasoline tax, and income tax. Revenues from all three sources are substantially above the corresponding period last year.

Figures from the U.S. Department of Commerce indicate that Mobile ranked sixth among the nation's ports in amount of tonnage handled during 1947. This is in sharp contrast to its position as twenty-fourth among the nation's leading ports 20 years ago. Exports for 1947 increased 57 per cent over those of 1946, while imports rose 22 per cent. Although more than half of Mobile's exports during recent months have been relief shipments to European countries, trade with Latin American countries continues to be of outstanding importance.

University of Alabama LANGSTON T. HAWLEY

FLORIDA

In spite of high yields from almost all major state tax sources, exceeding previous records except in the case of racing taxes, total revenue accruing to the General Fund was only $71,182,000 against $97,500,000 spent and $117,000,000 authorized by the last legislature to be spent. Need for further economies to prevent complete exhaustion of the state's previously accumulated surplus in view of the strong opposition to any new taxes, such as income or sales, has been the chief purpose in a study now being carried on by a joint Senate-House Tax Committee. Further complications will arise if the voters approve a proposed constitutional amendment to freeze the full seven-cent gasoline tax for road purposes.

Cash receipts from farm marketing during the early part of 1948 were about 20 per cent above the same period last year. The increase was due mainly to larger volume of cirtrus fruit and vegetables rather than price increases. In fact, citrus growing continued to be a "sick industry" and a committee of the Florida Bankers' Association estimated losses to growers over the past two crop years amounted to $200,000,000. Recommendations from this group and other interested sources for unified organization on a mutual basis have gone unheeded. While citrus fruit prices last season touched new lows (grapefruit on the tree sold for as little as 10 and 15 cents a box and oranges rarely reached two dollars a box F O B), Florida' tobacco farmers averaged better than 50 cents a pound for their early 1948 crop.

Construction in the first six months of 1948 continued to set new all-time records. Building permits totaled over $175,000,000 and nearly every section of the state participated in the building boom. Manufacturing employment at 90,000 in June was also running ahead of last year.

The first annual Florida Business Conference was scheduled at the University of Florida, October 14–16, with Dean Neil Carothers of Lehigh, Leon Keyserling of the Council of Economic Advisors, and members of the university staff leading the discussion.

University of Florida C. H. DONOVAN

GEORGIA

Both treasury receipts and budget allotments for the state of Georgia continued at record levels during the fiscal year ended June 30, 1948, according to the report of the financial condition of the state recently issued by State Auditor B. E. Thrasher, Jr. Total receipts for the year were $108,299,859, as compared to $98,663,506 for 1947 and $58,893,568 for 1942. Budget allotments of $106,713,320 were $11,065,067 above the 1947 figure, and more than double the 1942 expenditures of $49,339,657. Thus, expanding business activity and population growth, with their intensified demands for government services, together with rising prices, have increased both receipts and expenditures by approximately 100 per cent since the start of the war.

The motor fuel tax continued to be the largest single revenue producer for the state, with $35,246,106 collected from this source. This compares with $32,895,628 in 1947 and $18,176,225 in the low wartime year of 1943 when gasoline rationing was in effect. The motor vehicle license tax produced $3,803,140 and drivers' licenses another $1,050,000; thus, 37 per cent of the state's revenue was derived from motor vehicles and their use. The income tax raised $29,039,889, reflecting the continuance during the past year of the inflationary increase in money incomes. Income tax receipts were $21,746,395 in 1947 and only $15,182,921 in 1946. Except for the Georgia law permitting the deduction of federal income tax paid in calculating the state tax, revenue from this source would have been even larger. Even so, it accounted for 27 per cent of total receipts. Alcoholic beverages contributed $15,103,599 in taxes and fees, distributed as follows: liquor warehouse fees, $8,035,436; malt beverage tax,

$3,341,225; alcoholic beverage tax, $2,936,391; wine tax, $790,547. This group recorded the only decline among major sources of revenue, having produced $17,971,494 in 1947. Other important revenue sources included the cigar and cigarette tax, $8,264,634, and taxes on business, such as insurance taxes, the utility tax digest, occupation and corporation taxes, which together amounted to $5,786,910. The general property tax raised only $5,010,927.

Education and highways accounted for about 75 per cent of the state's total expenditures, to which public health and welfare added another 15 per cent. The Department of Education was allocated $37,568,828, with an additional $2,324,453 going to the Teacher Retirement System, while the University System received $7,469,742. The comparable figures for 1947 were $31,950,345, $2,128,931 and $4,400,000. Highways received $32,322,626, or $5,455,384 more than last year, while $17,971,494 was allocated to health and welfare services. An interesting feature of the state's fiscal operations for the past year is that, as a result of the failure of the 1947 appropriations bill to pass the state senate, it has been operating under a holdover bill from 1945 that appropriated only $61,000,000. The remainder of the 1948 collections were disbursed by the State Budgeting Board.

While the auditor's statement of condition as of June 30, 1948, showed a net general surplus of $1,320,336 for the state and its agencies over all liabilities, including reserves sufficient to meet all future obligations as they mature, fiscal authorities do not view the future with equanimity. Professor R. P. Brooks of the University of Georgia, for example, writing in Georgia Business for June 1948, reminds us that the foundation program in education developed by the Georgia legislature's Committee on Education calls for an annual expenditure of $109,817,178 in that area alone. Dr. Brooks points out that while notable progress has been made since 1941, including liquidation of or provision for all outstanding state debt and noteworthy increases in allocations for education and other important social interests, too much reliance must not be placed upon the continuance of the present high level of income and tax receipts. Georgia's present revenue system is not recession proof, and the state's income may be falling at the very time when it will be confronted by greatly increased demands for more money. Dr. Brooks makes several suggestions for improving the productivity of the revenue system, including (1) modifications in the intangibles tax law, (2) lowering the homestead exemption from $2,000 to $1,250, (3) a state monopoly of the liquor business, (4) a soft-drink tax, (5) discontinuance of the deduction of federal income tax in calculating the state tax, (6) an inheritance tax, (7) a higher automobile license tax and (8) a general sales tax. Space does not permit a discussion of Dr. Brooks' suggestions.

Emory University ALBERT GRIFFIN

MISSISSIPPI

A record tax collection for the fiscal year 1948 has been reported by the Mississippi Tax Commission. The collection of $50,552,515 provides a general fund balance of $25,936,611 against which, however, a number of warrants are

outstanding. Collections in most classifications in 1948 exceeded the collections of last year. Collections for the fiscal year were more than $3,000,000 above the collections for the calendar year ending last December. Collections for the first six months of 1948 are about $4,000,000 more than for the same period last year.

All major tax classifications showed a gain during the first six months period of 1948 as against the same period for last year. Sales tax collections showed a modest gain from $11,125,891 to $11,770,114. Income tax collections showed a gain of slightly over $1,000,000—the amount collected for the period was reported as $7,056,761. Moderate increases in the tobacco and beer, malt and wine taxes were recorded, the former changing from $3,006,240 to $3,174,096 and the latter from $980,076 to $1,076,736. Greatest percentage gain was recorded by the oil severance tax which increased from $1,482,469 to $3,111,569.

Gains were also shown in the franchise, state-wide privilege, chain store, inheritance, installment loan, and slot machine privilege tax divisions.

University of Mississippi CLARENCE E. KUHLMAN

NORTH CAROLINA

Perhaps the most significant economic fact in North Carolina in midsummer 1948 is that building has unmistakably reached boom proportions. The volume of construction is at unprecedented levels, at least in dollar terms. Gone seems to be all idea of waiting for more favorable conditions; gone apparently is all expectation that conditions will be more favorable in the proximate future. The still rising costs of building seem only to bring out the new projects instead of discouraging them.

There is little outward evidence in North Carlina of the softening of consumer demand so often said to have appeared over the nation. At the end of July a new round of wage increases in the textile industry is just beginning, to be followed, doubtless, by similar increases in the state's other major industries. The skies are not, however, entirely clear. The prices of farm products are no longer rising, and in some sections of the state small grain crops were adversely affected by a cold winter followed by dry weather in the spring. There are signs that the cotten textile industry and the furniture manufacturing industry are facing less favorable market conditions for their products than was the case a short while ago. How long the well-known stimuli that proceed from Washington will sustain present high levels of activity is not, of course, known to anyone, but most persons seem now to suppose that they will do so indefinitely. Or, perhaps the boom has simply entered a phase in which few persons are even supposing.

Davidson College C. K. BROWN

TENNESSEE

Tennessee's tax revenue soared to a record-breaking $131,831,671 during the fiscal year ending June 30, 1948, with the retail sales tax bringing in $41,067,477. This year's collections were the largest in state history and represent a 70 per

cent increase over the previous fiscal year and a 100 per cent increase over 1945–46 revenues. Even without including sales tax collections, a record revenue total was reached.

The 2 per cent sales tax brought in more than double the amount expected in its first year. When it was levied by the 1947 legislature, the most optimistic supporters predicted it would bring no more than $20,000,000 in additional revenues. Under provisions of the bill which provides for a 2 per cent levy on sale, rent, and use of all tangible personal property, 70 per cent of the first $20,000,000 was earmarked for educational purposes. Counties were allotted 80 per cent of the overage and most of this money was also designated for local educational uses.

Vast improvements in practically every phase of the state's city and county school systems have materialized during the past year because of these sales tax funds. The building and improvement programs now under way in the public schools of Tennessee are estimated to cost upward of $65,000,000. During the 1947–49 biennium, some 418 new school buildings are planned with an estimated cost of $40,731,400. Construction on 372 of these buildings is already in progress or is ready to be started.

This record take of taxes fell more heavily on the automobile users than any other group. Upward of 38 per cent of the total taxes collected in the state were paid by this group. This was more, by far, than the percentage paid by any other group.

The state's annual report for the 1947–48 fiscal year is expected to show an accumulated general fund surplus of $25,000,000. Of this, over $6,000,000 will have been added during the 1947–48 year. This figure does not include the $555,000 used in retiring that amount of bonds on July 1. Of the bonds retired, two-thirds of the amount carried an interest rate of $4\frac{1}{2}$ per cent and the other one-third either $4\frac{1}{4}$ or 4 per cent. This leaves the state debt at $77,147,544. On December 1, 1948, the state also plans to retire $6,000,000 in bonds.

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A program calling for the expenditure of $75,000 is being asked for the 1948–49 fiscal year to advertise the scenic, historic, and recreational advantages of Tennessee. This is the same amount expended last year.

This is a small enough proportional figure if we look at what 137 commercial recreational operations on the 19 TVA lakes and lake shores alone received in gross revenues in 1947—a total of $1,850,000. The survey on which that figure was derived showed a total investment of over $13 million in development of the various lakeside properties. Of the total capital investment, only $810,000 was public funds spent in seven state parks and 23 municipal and county parks along the TVA lake shores. The tourist trade is big business.

* * * * *

Tennessee is taking full advantage of the decentralization growth in industry. In many places industry has grown at a faster rate than the population. About one-third of the new plants erected last year were in towns of 5,000 population or less. This growth is healthy, but one precautionary note should be stressed.

Cities should weigh the advantages and disadvantages of a prospective new industrial firm carefully to determine that it fits in with long-term community development plans. It is to be hoped that the leaders in every Tennessee town and city are "penny" wise and not "pound" foolish.

George Peabody College JAMES E. WARD

VIRGINIA

A brief review of business conditions in Virginia for the first six months of 1948 indicates a trend toward an easier position. Predictions for the next six months are hazardous, but one encouraging factor is that total income payments to individuals continue at a high level. This is especially true of manufacturing payrolls, trade and service payments, and government payments. Gross farm income has shown a tendency to level off. As long as the spending stream flows with a strong current, business conditions in the state should remain good.

Trade has been wavering with the present high level being sustained largely by automobiles, automobile accessories, household appliances, building materials, hardware, and food. Some decline in food prices is expected in the latter months of the year. Meat prices are at a record level but by spring this market should ease because of a large supply of livestock. Price weakening has appeared in some cottons as a result of a cautious purchase policy of wholesalers and retailers. The latter appear to be holding back on orders for fall delivery with expectation of filling in if buying pressure justifies. Both are moving into a position of strength in the eventuality of a sagging market. Retail sales, though tending to level off, are running ahead of 1947, and are expected to continue on a flat basis for several months provided promotional effort now being put forth by large merchandising establishments is continued. The market for durables continues strong in spite of a drop in the prices of some goods. Furniture sales remain high, though somewhat below the 1947 level. Demand for quality furniture is strong with a short supply, while sales of poor grades are declining.

Many Virginia industries are still operating at their peaks. Coal production is near capacity and should continue for some time because of a heavy domestic demand and large foreign exports though labor disturbance might change this picture very quickly. Production of electric power is expanding. The output of the rayon industry, one of the state's largest, is increasing. The lumber industry is running at capacity, though some weakness has appeared in the market. The future of the industry, especially the small mills, depends upon new construction. At present, the construction volume is one of the strongest factors in the state's economy. How long it will continue is problematical. There is possibility of a new federal housing program, which, if it materializes, will prevent sagging of the construction industry and might support the whole economy for a decade or more. Heavy goods industries are solidly entrenched and should not be greatly affected by a business recession. The textile industry is in a strong competitive position because of (1) newer machinery, (2) nearness to raw materials, (3) greater stability of labor force, and (4) greater efficiency of the workers.

New capital investment has not been maintained at the 1946–1947 level except in public utilities where there has been no let-up in capital expansion. Bank debits continue upward, reflecting a large turnover in real estate. Time deposits have flattened and the E bond market indicates the using up of individual savings. Consumer credit is still rising with the largest percentage going into installment sales and charge account credit. The loan market is spotty with real estate loans continuing upward slightly and all other loans showing a tendency to level off.

The Virginia farmer is still in a favorable position, although some adverse conditions plague him. Farm cash receipts prospects are good in spite of an expected decline to support level of certain crops in the face of heavy yields. Livestock prices remain high with feed costs turning favorable due to good crop prospects. The apple crop is larger by several million bushels but still below the 10 year average. This should mean larger income for the apple areas of the state due to the total short supply and higher prices for the country. Farm labor remains in short supply with farm wages rising. This increases the pressure to mechanize in the face of a short supply of farm machinery. Farm land prices are at their highest since 1920 with considerable turnover in sales.

Virginia's economy must be greatly influenced in the future by several factors of a national and international character. Some of these are (1) congressional action on rising prices; (2) effects of the ECA program upon the demand for products of mines, farms, and manufactures; (3) the federal support program; (4) the proposed federal housing program; and (5) the military preparedness program. These are of such vital significance that any economic planning within the state must take them into careful consideration.

University of Richmond HERMAN P. THOMAS

PERSONNEL NOTES

Carlisle W. Baskin was appointed assistant professor of economics at Randolph Macon College for Men.

R. F. Beckert of Ohio University was a member of the 1948 summer school staff of the University of Florida.

J. N. Behrman of Davidson College has been granted leave of absence to do graduate work at Princeton University.

John S. Bickley, assistant professor of finance at the University of Alabama, has resigned to accept a position at the University of Washington.

Michael Brand, formerly at Columbia University, has been appointed instructor in economics at the University of Florida.

Edward Brennan, instructor in accounting at the University of Alabama, has resigned to accept an instructorship and to pursue graduate work at the University of Pennsylvania.

Edward Brooks of Ohio State University taught economics and applied economics in the past summer session at the University of Richmond.

Cecil C. Carpenter, professor of economics at the University of Kentucky, has been made dean of the College of Commerce.

A. Aldo Charles, formerly at Mary Washington College of the University of Virginia, has been appointed professor of business law at the College of Business Administration, University of Georgia.

Rita Jane Clinkscales has been appointed instructor in business statistics for the academic year 1948–1949 at the University of Alabama.

Robert H. Cojeen of the University of Florida is now associate professor of accounting at the University of Kentucky.

J. D. Copeland of Mississippi State College for Women taught at the University of Florida during the past second summer session.

Arthur L. Cunkle, formerly assistant professor of economics at the University of Richmond, has accepted a position in the University of Florida.

J. Frank Dame, formerly educational director of the National Office Management Association, is now professor of commerce and director of business education at Florida State University.

Miles E. Dunlap, assistant professor of economics at the College of Business Administration, University of Georgia at Athens, has transferred to the Atlanta Division, University of Georgia.

C. W. Emory, formerly at Ohio State University, has been appointed instructor in the College of Business Administration, University of Florida.

Sue Flathmann has been appointed instructor in statistics at the University of Florida.

James E. Gates, dean of the College of Business Administration, University of Georgia, is serving in this capacity both at Athens and at the Atlanta Division of the University.

Floyd E. Gillis, Jr., of Hendrix College was a member of the teaching staff of the College of Business Administration, University of Florida, during the second summer session.

Eugene Griner has been appointed instructor in economics at the College of Business Administration, University of Georgia. Mr. Griner will also assist with the college's guidance and orientation program.

William Rogers Hammond, formerly engaged in accounting practice, is assistant professor of accounting at the Atlanta Division, University of Georgia.

H. W. Hargreaves, formerly research economist with the New York Life Insurance Company, has been appointed professor of economics at the University of Kentucky.

Joseph B. Harrington, who was in charge of the work in economics and registrar at Emory-at-Valdosta, died on July 1, 1948.

R. M. Havens, associate professor of economics at the University of Alabama, has been granted a leave of absence for the academic year 1948–1949 to serve with the European Recovery Administration in Paris.

William W. Haynes has joined the staff of the College of Commerce, University of Kentucky, as assistant professor of economics.

Harold Heckman, head of the accounting concentration at the College of Business Administration, University of Georgia, has been assigned one-third time to the School of Law.

O. E. Heskin, professor of economics at the University of Florida, has been on leave since February with the Foreign Service of the State Department.

J. G. Johnson, formerly on the staff of the Atlanta Division of the University of Georgia, is now acting professor of economics at the University of Florida.

Lewis K. Johnson of Washington and Lee University has been promoted to professor of commerce and business administration.

Louis Jordan is an instructor of accounting at Alabama Polytechnic Institute.

David M. Kerley, formerly of the St. Helena Division of the College of William and Mary, has been appointed acting assistant professor of statistics at the University of Virginia.

Richard C. Kidd has been appointed instructor in the Industrial Management Department, Georgia School of Technology.

Clarence E. Kuhlman has resigned at the University of Mississippi to accept an appointment in the Department of Transportation and Public Utilities, College of Business Administration, University of Tennessee.

George W. Lafferty, associate professor of accounting at the University of Alabama, has resigned to go into public accounting practice in the New York office of Frazer and Torbet.

George P. W. Lamb, formerly at Oglethorpe University, has been appointed assistant professor in the Industrial Management Department, Georgia School of Technology.

George E. Lent of the University of North Carolina taught in the second session of the 1948 summer school at Duke University.

Homer C. Lewis of Georgetown College is now at the University of Kentucky as associate professor of commerce.

Harry A. Lipson has been appointed assistant professor of marketing at the University of Alabama.

James A. Lyons of North Carolina State College taught in the Department of Economics, University of Florida, during the second summer session.

L. P. McGrath has resigned from the faculty of the College of Business Administration, University of Georgia.

John T. Masten of Kalamazoo College has accepted a position as associate professor of economics at the University of Kentucky.

Royal Mattice has returned to Florida State University as acting associate professor of economics after a year's leave of absence for graduate study at the University of North Carolina.

Jack Harwood Menning has joined the faculty of the University of Alabama as associate professor of marketing.

Charles North Moore has been appointed instructor in business statistics at the University of Alabama.

Glen E. Murphy has been appointed instructor in commerce at Florida State University.

L. J. Nachtrab, assistant professor and acting head of the Aeronautical Administration concentration at the College of Business Administration, University of Georgia, has been promoted to associate professor.

William H. Nicholls has resigned his position as assistant professor of economics at the University of Chicago and editor of *The Journal of Political Economy*. On October 1 he joined the faculty of Vanderbilt University as professor of economics. As a part of the greatly expanded program in economics at Vanderbilt, made possible by a grant from the General Education Board, he will be responsible for the initiation of a sequence of graduate courses in agricultural economics and the development of a research program in the agricultural economy of the South.

George S. Petras is now instructor in economics at the College of Business Administration, University of Georgia.

W. J. Proctor, associate professor in the Industrial Management Department, Georgia School of Technology, has been promoted to professor.

LeRoy L. Qualls, formerly of the University of Illinois, has been appointed assistant professor of economics at the University of Florida.

Einar Rasmussen, assistant professor at the College of Business Administration, University of Georgia, has resigned to enter the real estate business.

Costic Roman has been appointed instructor at the College of Business Administration, University of Georgia, to organize and administer a guidance and orientation program.

Ralph C. Russell, associate professor of accounting at the University of Alabama, has resigned to become head of the Accounting Department at Texas College of Arts and Industry.

Howard G. Schaller has joined the economics staff at Alabama Polytechnic Institute.

Gregor Sebba has been promoted from associate professor to professor of economics at the College of Business Administration, University of Georgia.

F. McP. Sinclair, recently a member of the faculty of Catawba College, has been appointed assistant professor in economics and business at Davidson College.

G. N. Sisk has been promoted from associate professor in the department of Industrial Management, Georgia School of Technology, to acting head of the newly organized Social Science Department.

Chester R. Smith, of the University of California, has accepted a position as assistant professor of economics at Clemson Agricultural College.

Everett G. Smith of the University of Texas taught marketing and transportation courses at the University of Florida during the second summer session.

Glenn R. Smith, formerly director of research with the Farm Credit Administration of Columbia, has accepted a position as experiment station administrator, U. S. Department of Agriculture, Washington, D. C.

Howard R. Smith, of the College of Business Administration, University of Georgia, is at Harvard University for the year 1947–48 on a joint General Education Board-Harvard University fellowship, to study teaching methods at the Harvard Business School.

Roger F. Smith of Northern Texas State Teachers College has been appointed instructor of economics at Alabama Polytechnic Institute.

Eldred C. Speck has been appointed assistant professor of commerce at the University of Kentucky.

Glenn Sutton has rejoined the faculty of the College of Business Administration, University of Georgia after serving as director of the Savannah Division of the University.

Franklin H. Sweet, assistant professor of accounting at the University of Alabama, has resigned to accept a position on the faculty of Spring Hill College.

Lyell J. Thomas of the University of Virginia has accepted a position as assistant professor of economics at Juniata College.

Samuel Thompson, formerly associate professor of economics at Alabama Polytechnic Institute, has been appointed associate professor in the Department of Industrial Management, Georgia School of Technology.

Wallace D. Trevillian has been promoted to the rank of assistant professor of economics at Clemson Agricultural College.

Rutledge Vining of the University of Virginia has been granted a leave of absence for the session of 1948–1949 to serve as research assistant in the National Bureau of Economic Research.

Jack N. Wagoner of Indiana University has been appointed instructor in economics at the University of Richmond for the session 1948–1949.

Arthur M. Weimer, dean of the School of Business Administration, Indiana University, visited the University of Georgia in July as a consultant on the matter of integration of the work of the College of Business Administration at Athens and at the Atlanta Division. Dean Weimer at the same time participated in discussions between representatives of the College of Business Administration of the University of Georgia, the Industrial Management Department of the Georgia School of Technology, and the Emory University School of Business

Administration looking toward developing cooperative efforts in business administration education in the state.

Edward Wiest has retired as dean of the College of Commerce, University of Kentucky.

Howard W. Wissner of the University of Pittsburgh has been appointed associate professor in personnel and labor relations at Alabama Polytechnic Institute.

Roy Wood, of the University of Virginia, has been appointed instructor in economics at Clemson Agricultural College.

David M. Wright of the University of Virginia served as professor of economics in the 1948 summer session of Harvard University.

The following names have been added to the membership of the Southern Economic Association:

Edison L. Bowers, Ohio State University, Columbus 10, Ohio
Royal W. France, Rollins College, Winter Park, Fla.
Helen B. Goetsch, Hampton Institute, Hampton, Va.
Paul N. Guthrie, University of North Carolina, Chapel Hill, N. C.
Kathleen C. Jackson, Hollins College, Va.
William H. Joubert, 701 Arnstein Building, Knoxville, Tenn.
Rose Karfoil, Bennett College, Greensboro, N. C.
C. R. Lockyer, 303 Jackson Avenue, Georgetown, Ky.
C. H. McGregor, University of North Carolina, Chapel Hill, N. C.
Aurelius Morgner, Texas A & M College, College Station, Texas
W. L. Murray, LaGrange College, LaGrange, Ga.
Ray Putnam, Texas A & M College, College Station, Texas
C. Wilson Randle, Texas A & M College, College Station, Texas
Lillian Rudeseal, Mary Baldwin College, Staunton, Va.
Julian R. Seip, 117 Yeardley Avenue, Lynchburg 2, Va.
Hugh T. Shockley, Wofford College, Spartanburg, S. C.
H. A. Staine, 313 East Parkway Drive, Columbia, Mo.
Norman M. Sun, Park College, Parkville, Mo.

NOTE

The eighteenth annual conference of the Southern Economic Association will be held in Atlanta, Georgia, November 19–20 on the campus of the Atlanta Division of the University of Georgia.

BOOKS RECEIVED

The Economics of the Guaranteed Wage. Washington: Chamber of Commerce of the United States, 1948. Pp. 27. 20¢.

Revolution in Glassmaking: Entrepreneurship and Technological Change in the American Industry—1880–1920. By Warren C. Scoville. Cambridge, Mass.: Harvard University Press, 1948. Pp. xvii, 398. $5.00.

The Pattern of Imperialism: A Study in the Theories of Power. By E. M. Winslow. New York: Columbia University Press, 1948. Pp. xii, 278. $3.75.

The Labor Force in the United States, 1890–1960. By John D. Durand. New York: Social Science Research Council, 1948. Pp. xviii, 284. $2.50.

Economics: Principles and Problems. By Paul F. Gemmill and Ralph H. Blodgett. 3rd ed. New York: Harper & Bros., 1948. Pp. ix, 517. $5.00.

Population Analysis. By T. Lynn Smith. New York: McGraw-Hill Book Co., 1948. Pp. xiii, 421. $4.50.

These Rights Are Ours to Keep. By Jerome Ellison. New York: Public Affairs Committee, 1948. Pp. 31. 20¢.

Supplement to Economic Report: Salient Features of the World Economic Situation, 1945–47. Lake Success: United Nations, 1948. Pp. v, 140. $1.00.

The Marketing of Surplus War Property. By James Allan Cook. Washington: Public Affairs Press, 1948. Pp. ix, 211. $3.25.

Economics: An Introductory Analysis By Paul A. Samuelson. New York: McGraw-Hill Book Co., 1948. Pp. xx, 622. $4.50.

Live Long and Like It. By C. Ward Crampton. New York: Public Affairs Committee, 1948. Pp. 32. 20¢.

Economic Security and Individual Freedom: Can We Have Both? By Albert Lauterbach. Ithaca, N. Y.: Cornell University Press, 1948. Pp. iv, 178. $2.50.

Modern Economics. By Arthur Edward Burns and others. New York: Harcourt, Brace and Co., 1948. Pp. xvi, 954.

The More Perfect Union: A Program for the Control of Inter-group Discrimination in the United States. By R. M. MacIver. New York: Macmillan Co., 1948. Pp. vi, 311. $4.00.

Walden Two. By B. F. Skinner. New York: Macmillan Co., 1948. Pp. 266. $3.00.

Modern Business: An Introduction to Principles and Problems. By Lloyd V. Douglas and others. New York: McGraw-Hill Book Co., 1948. Pp. x, 417. $3.50.

Pricing, Distribution, and Employment: Economics of an Enterprise System. By Joe S. Bain. New York: Henry Holt & Co., 1948. Pp. xiv, 496. $3.75.

Grundzüge der Theoretischen Nationalökonomie. By Alfred Amonn. Berne: Francke, 1948. Pp. 199. Paper, s.fr. 11.; cloth, s.fr. 13.80.

Grundlagen der Theoretischen Volkswirtschaftslehre. By Heinrich von Stackelberg. Berne: Francke, 1948. Pp. xvi, 368. Paper, s.fr. 19.50; cloth, s.fr. 23.50.

Money, Debt, and Economic Activity. By Albert Gailord Hart. New York: Prentice-Hall, 1948. Pp. xviii, 558. $6.65.

An Appraisal of Official Economic Reports. New York: National Industrial Conference Board, 1948. Pp. 70. 50¢.

Problems in Price Control: Pricing Standards. By David F. Cavers and others. Washington: U. S. Government Printing Office, 1947. Pp. xvii, 522. $1.00.

Insurance: A Practical Guide. By S. B. Ackerman. 3rd ed. New York: Ronald Press Co., 1948. Pp. x, 769. $6.00.

The Story of U.N.R.R.A. Washington: United Nations Relief and Rehabilitation Administration, 1948. Pp. 47.

The Cumulation of Economic Knowledge. By Arthur F. Burns. New York: National Bureau of Economic Research, 1948. Pp. 75.

The Role of Inventories in Business Cycles. By Moses Abramovitz. New York: National Bureau of Economic Research, 1948. Pp. 26. 50¢.

State Labor Relations Acts: A Study of Public Policy. By Charles C. Killingsworth. Chicago: University of Chicago Press, 1948. Pp. x, 328. $4.00.

Economic Analysis. By Kenneth E. Boulding. Rev. ed. New York: Harper & Bros., 1948. Pp. xxvi, 884.

Investment, Location, and Size of Plant: A Realistic Inquiry into the Structure of British and American Industries. By P. Sargent Florence, assisted by W. Baldamus. Cambridge: University Press; New York: Macmillan Co., 1948. Pp. xiii, 211. $3.75.

Introduction to Business. By Edwin H. Spengler and Jacob Klein. 3rd ed. New York: McGraw-Hill Book Co., 1948. Pp. xiii, 671. $4.50.

Corporation Finance. By Hiram L. Jome. New York: Henry Holt & Co., 1948. Pp. x, 676. $4.00.

Introduction to Business. By Lewis A. Froman. Chicago: Richard D. Irwin, 1948. Pp. x, 601. $4.25.

The Agrarian Revolt in Western Canada: A Survey Showing American Parallels. By Paul F. Sharp. Minneapolis: University of Minnesota Press, 1948. Pp. ix, 204. $3.00.

Unions, Management, and the Public. By E. Wight Bakke and Clark Kerr. New York: Harcourt, Brace & Co., 1948. Pp. xx, 946. $5.00.

Economic Man: In Relation to His Natural Environment. By C. Reinold Noyes. 2 vols. New York: Columbia University Press, 1948. Pp. xiv, 1443. $15.00.

An Introduction to Business. By Clifford Milton Hicks. Rev. ed. New York: Rinehart & Co., 1948. Pp. xix, 715. $4.75.

Communism or Capitalism? New York: National Foremen's Insitute, 1948. Pp. 30. 25¢.

Government of the Netherlands. By Amry Vandenbosch and Samuel J. Eldersveld. Lexington: Bureau of Government Research, University of Kentucky, 1947. Pp. 150. 75¢.

Elementary Economics. By Fred Rogers Fairchild and others. 5th ed., 2 vols. New York: Macmillan Co., 1947. Pp. xli, 1325. $7.00.

Forty Years After: Pius XI and the Social Order. By Raymond J. Miller. St. Paul, Minn.: Fathers Rumble and Carty Radio Replies Press, 1947. Pp. xvi, 328. Paper $2.75.

Power, Machines, and Plenty. By Gloria Waldron and J. Frederic Dewhurst. New York: Public Affairs Committee, 1948. Pp. 32. 20¢.

Basic Data of the American Economy. By W. Nelson Peach and Walter Krause. Chicago: Richard D. Irwin, 1948. Pp. 209. $2.00.

Economics: Principles and Applications. By James Harvey Dodd and C. W. Hasek. Cincinnati: South-Western Publishing Co., 1948. Pp. vi, 729. $4.50.

The Economic Doctrines of John Gray—1799–1883. By Janet Kimball. Washington: Catholic University of America Press, 1948. Pp. viii, 162.

Principles and Practices of Money and Banking. By Charles R. Whittlesey. New York: Macmillan Co., 1948. Pp. xxiv, 688. $4.75.

Principles of Urban Real Estate. By Arthur M. Weimer and Homer Hoyt. Rev. ed. New York: Ronald Press Co., 1948. Pp. xiv, 512. $4.75.

Elements of Modern Economics. By Albert L. Meyers. 3rd ed. New York: Prentice-Hall, 1948. Pp. xx, 456. $5.00.

Wool Tariffs and American Policy. By Donald M. Blinken. Washington: Public Affairs Press, 1948. Pp. xii, 168. $3.00.

Effect of Purchasing Farm Machinery for Shipment Abroad. By Kenneth P. Sheldon. New York: American Entreprise Association, 1948. Pp. 22. 50¢.

Civilian War Transport: A Record of the Control of Domestic Traffic Operations by the Office of Defense Transportation 1941–1946. Washington: U. S. Government Printing Office, 1948. Pp. ix, 361. $1.75.

Die Neue Weltwirtschaft. By Adolf Weber. Munich: Richard Pflaum, 1947. Pp. xii, 470.

The Economics of Public Finance. By Philip E. Taylor. New York: Macmillan Co., 1948. Pp. xxii, 617. $4.50.

Trade Union Wage Policy. By Arthur M. Ross. Berkeley: University of California Press, 1948. Pp. viii, 133. $3.00.

Analysis of Wisconsin Income. By Frank A. Hanna and others. New York: National Bureau of Economic Research, 1948. Pp. xviii, 261. $3.50.

Balance of External Payments of Puerto Rico, 1942–1946. By Robert L. Sammons and Belen H. Cestero. Rio Piedras: University of Puerto Rico, 1948. Pp. 65. 50¢.

The Structure of Postwar Prices. By Frederick C. Mills. New York: National Bureau of Economic Research, 1948. Pp. 59. 75¢.

SOUTHERN ECONOMIC ASSOCIATION

Membership dues in the Association are: annual $3.00, sustaining $5.00, contributing $10.00, life $60.00, institutional $10.00. Membership fees include payment for a year's subscription to *The Southern Economic Journal*.

Applications for membership should be addressed to J. B. McFerrin, University of Florida, Gainesville, Florida.